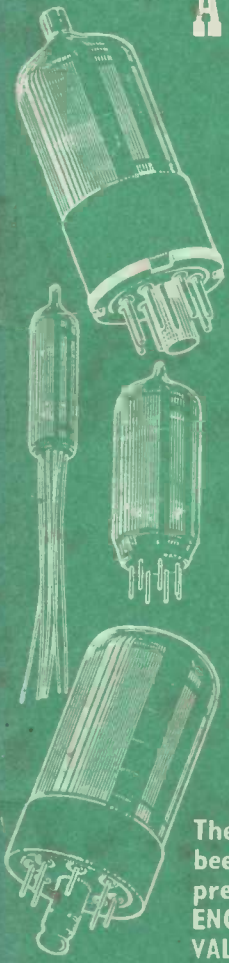
A Comprehensive RADIO VALVE GUIDE

INTERNATIONAL EDITION

BOOK 4

BY

B. B. BABANI



CHARACTERISTICS AND BASE CONNECTIONS ARE GIVEN FOR—

All receiving valves issued since 1956—including English, American and European : miniatures and sub-miniatures.

All the modern English and American television C.R. Tubes.

Voltage and current stabilisers, thyratrons rectifiers, etc.

* * *

Complete diagrams of all the valve bases are shown—not simply the pin connections.

The unique features of Book's 1 2 and 3 have been retained : more than 1,100 valves not previously shown are presented, including all ENGLISH, EUROPEAN & AMERICAN RECEIVING VALVES ISSUED SINCE 1956

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A Comprehensive
RADIO VALVE GUIDE

BOOK 4

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B. B. BABANI

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CONTENTS

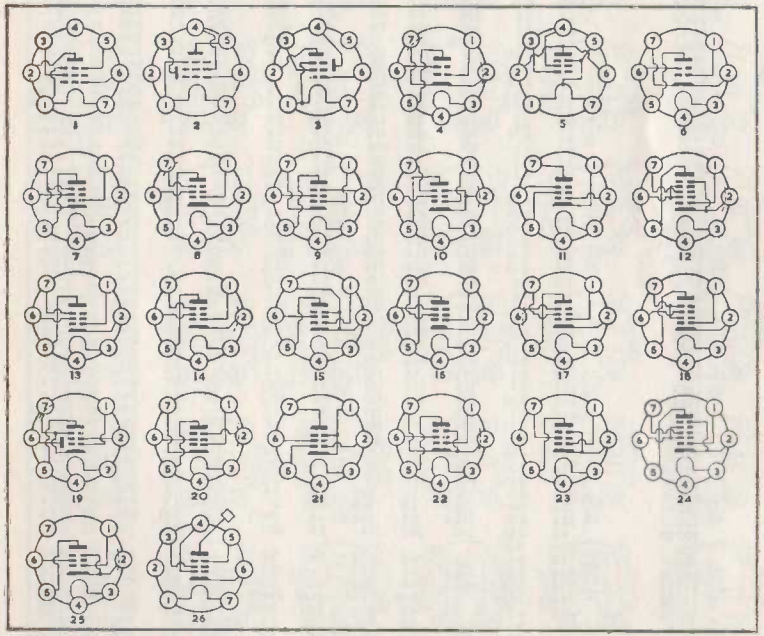
Screened Tetrodes and Pentodes	10
Frequency Changers	17
Triode Amplifiers	18
Sub Miniature Valves	26
Tuning Indicators	27
Rectifiers	28
Output Valves	30
Regulators and Thyratrons	35
Television C.R. Tubes	36
Diodes	39
Radio Receiving, Transmitting, and C.R.T. Designation Systems	40
Index	43
Index of U.S.S.R. Valves	47

SCREENED TETRODES and PENTODES

Type	FILAMENT or HEATER Volts	Amps	ANODE Volts	I/mA	SCREEN Volts	I/mA	Neg. Grid Volts	ra KΩ	gm mA/V	BASE Type	Ref.	Maker
1AF33	1.4	0.025	67.5	1.6	67.5	0.4	0	600	0.5	B7G	2	U.S.A.
1AF34	1.2	0.03	67.5	1.6	67.5	0.4	0	600	0.5	B7G	2	U.S.A.
1AM4	1.4	0.025	90	2.4	67.5	0.9	0	500	0.38	B7G	1	Japanese
1AR5	1.4	0.025	67.5	0.9	67.5	0.25	0	800	0.5	B7G	2	Japanese
1AS5	1.4	0.025	67.5	0.9	67.5	0.25	0	800	0.5	B7G	3	Japanese
1DN5	1.4	0.05	67.5	2.1	67.5	0.55	—	600	0.63	B7G	3	U.S.A.
1F33	1.4	0.025	90	3.5	67.5	1.4	2	500	0.75	B7G	1	U.S.A.
1F34	1.2	0.03	90	3.5	67.5	1.4	2	500	0.75	B7G	1	U.S.A.
1K1Π	1.2	0.06	60	1.7	45	0.6	0.5	1500	0.65	B7G	1	Soviet
1B1Π	1.2	0.06	60	1.0	45	0.25	0	1000	0.5	B7G	2	Soviet
2CY5	2.4	0.6	125	10.0	80	1.5	1	100	8.0	B7G	4	U.S.A.
2EA5	2.3	0.6	250	10.0	140	0.95	1	150	8.0	B7G	6	U.S.A.
2П1П	1.2	0.12	67.5	2.8	67.5	0.65	3.5	260	0.9	B7G	5	Soviet
	2.4	0.06										
3CF5	3.15	0.6	125	11.0	125	2.3	—	300	7.6	B7G	7	U.S.A.
3CY5	2.9	0.45	125	10.0	80	1.5	1	100	8.0	B7G	4	U.S.A.
3DK6	3.15	0.6	125	12.0	125	3.8	56Ω	—	9.8	B7G	8	U.S.A.
3EA5	3.0	0.45	250	10.0	140	0.95	1	150	8.0	B7G	6	U.S.A.
4AU6	4.2	0.45	250	10.8	150	4.3	1	1000	5.4	B7G	9	U.S.A.
4BA6	Vari-mu	4.2	0.45	250	11.0	100	4.2	68Ω	1500	4.4	B7G	9	U.S.A.
4BC5		4.2	0.45	250	7.5	150	2.1	1.75	800	5.7	B7G	10	U.S.A.
4BN6		4.2	0.45	80	0.23	60	4.5	1.3	Gated Beam		B7G	11	U.S.A.
4BZ6	Vari-mu	4.2	0.45	200	11.0	150	2.6	180Ω	600	6.1	B7G	8	U.S.A.
4CB6		4.2	0.45	200	9.5	150	2.8	2	600	6.2	B7G	8	U.S.A.
4CE5		4.2	0.45	200	2.5	150	2.8	6.5	600	6.2	B7G	10	U.S.A.
4C56	Heptode	4.2	0.45	100	1.1	30	0.75	1	1200	0.95	B7G	12	U.S.A.
4CY5		4.2	0.3	125	10.0	80	1.5	1	100	8.0	B7G	4	U.S.A.
4DE4		4.2	0.45	125	15.5	125	4.2	56Ω	250	8.0	B7G	8	U.S.A.
4DK6		4.2	0.45	125	12.0	125	3.8	56Ω	—	9.8	B7G	8	U.S.A.
4DT6		4.0	0.45	150	1.1	100	2.1	560Ω	150	0.65	B7G	13	U.S.A.
4EW6		4.2	0.6	125	11.0	125	6.2	56Ω	200	14	B7G	13	U.S.A.
6AU6A		6.3	0.3	250	10.8	150	4.3	1	1000	5.2	B7G	9	U.S.A.
6CB6A		6.3	0.3	200	9.5	150	2.8	2	600	6.2	B7G	8	U.S.A.
6CF5		6.3	0.3	125	11.0	125	2.3	—	300	7.6	B7G	7	U.S.A.
6CY5		6.3	0.2	125	10.0	80	1.5	1	100	8.0	B7G	4	U.S.A.
6DK6		6.3	0.3	125	12.0	125	3.8	56Ω	—	9.8	B7G	8	U.S.A.
6EA5		6.3	0.2	250	10.0	140	0.95	1	150	8.0	B7G	6	U.S.A.
6E56	Vari-mu	6.3	0.3	12.6	3.0	6.3	1.1	0.7	150	1.9	B7G	14	U.S.A.
6ET6		6.3	0.3	12.6	2.0	6.3	0.7	0.75	200	2	B7G	15	U.S.A.
6EW6		6.3	0.4	125	11.0	125	6.2	56Ω	200	14	B7G	13	U.S.A.
6F17		6.3	0.3	600	5.9	600	1.2	—	—	8.3	B7G	16	Ediswan
6F21	Vari-mu	6.3	0.2	250	8.0	200	2.1	2.5	—	2.1	B7G	17	Ediswan
6F31		6.3	0.3	250	11.0	100	4.2	5	1500	4.4	B7G	9	U.S.A.
6F32		6.3	0.175	180	8.0	120	2.4	200Ω	530	4.6	B7G	15	U.S.A.
6F33		6.3	0.175	120	5.2	120	3.5	2	—	3.2	B7G	13	U.S.A.
6F35		6.3	0.175	28	2.7	28	1.0	270Ω	100	2.75	B7G	15	U.S.A.
6F36		6.3	0.45	300	10.0	150	2.2	110Ω	1000	9.0	B7G	20	U.S.A.
6H1		6.3	0.2	250	10.0	—	—	—	—	—	B7G	18	Ediswan
6B2Π		6.3	0.3	250	6.5	100	1.6	1.5	—	2	B7G	19	Soviet
6K1Π		6.3	0.15	250	6.7	100	2.7	3	450	1.85	B7G	15	Soviet
6K4Π		6.3	0.3	250	11.0	100	4.2	68Ω	1500	4.4	B7G	20	Soviet
6Ж1П		6.3	0.2	120	5.5	120	5.5	200Ω	75	3.55	B7G	13	Soviet
6Ж2П		6.3	0.175	120	7.5	120	3.5	200Ω	300	5.2	B7G	15	Soviet
6Ж3П		6.3	0.3	250	7.0	150	2.0	2	700	5.0	B7G	15	Soviet
6Ж4П		6.3	0.3	250	11.0	100	4.2	68Ω	1500	4.4	B7G	20	Soviet
6Ж5A		6.3	0.45	250	10.0	100	2.5	160Ω	500	9.0	B7G	20	Soviet
6Ж5П		6.3	0.45	250	10.0	100	2.5	160Ω	500	9.0	B7G	8	Soviet
12BL6		12.6	0.15	12.6	1.35	12.6	0.5	0.65	500	1.35	B7G	9	U.S.A.
12CN5		12.6	0.45	12.6	4.5	12.6	3.5	0	40	3.8	B7G	21	U.S.A.
12CX6		12.6	0.15	12.6	3.0	12.6	1.4	2.2MΩ	40	3.1	B7G	9	U.S.A.
12CY6		12.6	0.2	12.6	1.6	12.6	0.4	0	140	3.25	B7G	9	U.S.A.
12DZ6		12.6	0.175	12.6	5.3	12.6	2.6	100KΩ	30	3.6	B7G	9	U.S.A.
12EA6		12.6	0.175	12.6	3.2	12.6	1.4	10MΩ	32	3.8	B7G	9	U.S.A.
12EG6		12.6	0.15	12.6	0.4	12.6	2.4	0.8	150	0.8	B7G	12	U.S.A.
12EK6		12.6	0.2	12.6	4.4	12.6	2.0	2.2MΩ	40	4.2	B7G	9	U.S.A.
12EZ6		12.6	0.175	12.6	1.9	12.6	0.7	0.7	400	2.7	B7G	9	U.S.A.
12F31		12.6	0.15	250	11.0	100	4.2	5	1500	4.4	B7G	9	U.S.A.
18FW6		18.0	0.1	100	9.0	100	3.9	68Ω	250	4.1	B7G	9	U.S.A.
401A		6.3	0.15	90	3.9	90	1.4	820Ω	300	2.0	B7G	22	Ericsson
408A		20.0	0.05	120	7.5	120	—	2	300	5.0	B7G	10	Ericsson
409A		6.3	0.175	120	5.2	120	3.5	2	—	3.2	B7G	13	Ericsson
6516		6.3	0.2	250	16.0	250	2.25	18.5	150	2.55	B7G	23	U.S.A.

SCREENED TETRODES and PENTODES—Contd.

Type	FILAMENT or HEATER Volts	Amps	ANODE Volts	I/mA	SCREEN Volts	I/mA	Neg. Grid Volts	ra KΩ	gm mA/V	BASE Type	Ref.	Maker
6954	6.3	0.3	150	5.8	150	6.6	1	50	2.05	B7G	8	U.S.A.
6968	6.3	0.175	120	7.5	120	2.5	2	—	5.0	B7G	7	U.S.A.
7032	6.3	0.3	250	4.5	100	7.2	2	—	1.8	B7G	12	U.S.A.
7036	6.3	0.3	150	5.5	71	9.0	0	Gated Beam		B7G	12	U.S.A.
7056	13.5	0.15	200	9.5	150	2.8	180Ω	600	6.2	B7G	8	U.S.A.
7167	13.5	0.09	125	10.0	80	1.4	1	—	8.0	B7G	6	U.S.A.
DAF961	1.2	0.06	67.5	2.2	67.5	0.3	0	600	0.7	B7G	2	E. Eurpn.
DF961	1.2	0.06	67.5	3.4	67.5	1.5	0	250	0.85	B7G	1	E. Eurpn.
E90F	6.3	0.15	250	7.4	150	2.9	100Ω	1300	4.6	B7G	8	European
E95F	6.3	0.175	120	7.5	120	2.5	2	340	5.0	B7G	10	European
E99F	6.3	0.15	250	9.2	100	3.3	80Ω	1000	3.6	B7G	8	European
EF97 Vari-mu	6.3	0.3	12.6	3.0	6.3	1.1	0.7	150	1.9	B7G	14	European
EF98	6.3	0.3	12.6	2.0	6.3	0.7	0.75	200	2	B7G	15	European
EF905	6.3	0.175	120	7.5	120	2.5	2	340	5.0	B7G	10	European
EH900S	6.3	0.3	150	6.5	75	9.0	0	—	—	B7G	24	European
M8196	6.3	0.175	120	5.5	120	3.5	2	—	3.5	B7G	8	Mullard
R144	6.3	0.3	250	10.0	250	2.6	2	1000	7.5	B7G	17	French
S6F12	6.3	0.3	250	10.0	250	2.5	2	900	7.5	B7G	17	Ediswan
S6F17	6.3	0.3	600	5.9	600	1.2	—	—	8.3	B7G	16	Ediswan
TS51	6.3	0.175	150	7.0	140	2.2	3	420	4.3	B7G	25	European
W25	1.4	0.025	90	1.65	90	0.5	0	1400	0.85	B7G	1	G.E.C.
ZD25	1.4	0.025	90	1.1	90	0.4	0	1600	0.4	B7G	2	G.E.C.
Г837	12.6	0.7	500	60.0	0	30	85	—	3.5	B7G	26	Soviet

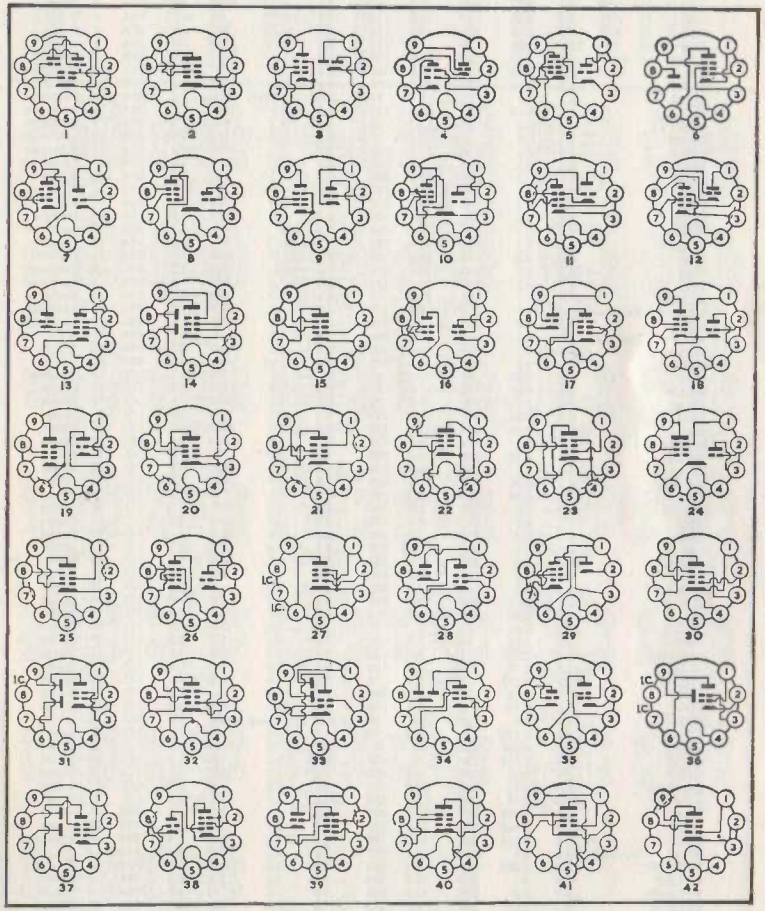


SCREENED TETRODES and PENTODES—Contd.

Type	FILAMENT or HEATER Volts	Amps	ANODE Volts	I/mA	SCREEN Volts	I/mA	Neg. Grid Volts	ra KΩ	gm mA/V	BASE Type	Ref.	Maker
4BU8	4.2	0.45	100	2.2	67.5	Sync.	& A G C	in TV		B9A	1	U.S.A.
5A/170K	6.3	0.3	180	13.0	150	3.0	630Ω	—	16.5	B9A	2	U.S.A.
5BW8	4.7	0.6	250	10.0	110	3.5	68Ω	250	5.2	B9A	3	U.S.A.
5CL8A	4.7	0.6	125	12.0	125	4.0	1.0	100	6.4	B9A	16	U.S.A.
5CQ8	4.7	0.6	125	12.0	125	4.2	1.0	140	5.8	B9A	4	U.S.A.
5CR8	4.7	0.6	125	13.0	125	3.0	56Ω	300	7.7	B9A	11	U.S.A.
5DH8	5.2	0.6	125	13.5	125	3.8	56Ω	150	8.6	B9A	5	U.S.A.
5EA8	4.7	0.6	125	12.0	125	4.0	1.0	80	6.4	B9A	17	U.S.A.
5EH8	4.7	0.6	125	12.0	125	4.0	1.0	170	6.0	B9A	18	U.S.A.
6AM8A	6.3	0.45	200	9.5	150	3.0	120Ω	300	5.8	B9A	6	U.S.A.
6AN8A	6.3	0.45	200	9.5	150	2.8	180Ω	300	6.2	B9A	7	U.S.A.
6AT8A	6.3	0.4	150	6.2	150	1.8	3.5	—	2.1	B9A	8	U.S.A.
6AU8A	6.3	0.6	200	15.0	125	3.4	82Ω	150	7.0	B9A	9	U.S.A.
6BE8A	6.3	0.45	250	10.0	110	3.5	68Ω	400	5.2	B9A	5	U.S.A.
6BW8	6.3	0.45	250	10.0	110	3.5	68Ω	250	5.2	B9A	3	U.S.A.
6CG8A	6.3	0.45	250	7.7	150	1.6	200Ω	750	4.6	B9A	10	U.S.A.
6CL8A	6.3	0.45	125	12.0	125	4.0	1.0	100	6.4	B9A	16	U.S.A.
6CQ8	6.3	0.45	125	12.0	125	4.2	1.0	140	5.8	B9A	4	U.S.A.
6CR8	6.3	0.45	125	13.0	125	3.0	56Ω	300	7.7	B9A	11	U.S.A.
6CS8	6.3	0.45	125	13.0	125	3.0	56Ω	300	7.7	B9A	12	U.S.A.
6CU8	6.3	0.45	200	9.5	150	2.8	180Ω	300	6.2	B9A	13	U.S.A.
6CX8	6.3	0.75	200	24.0	125	5.2	68Ω	70	10.0	B9A	9	U.S.A.
6DC8	6.3	0.3	250	9.0	100	2.7	2.0	1000	3.8	B9A	14	U.S.A.
6DG7	6.3	0.3	100	10.8	100	4.4	68Ω	250	4.3	B9A	15	U.S.A.
6DR8	6.3	0.3	12.6	0.45	12.6	0.14	2.2MΩ	1000	1.0	B9A	14	U.S.A.
6EA8	6.3	0.45	125	12.0	125	4.0	1.0	80	6.4	B9A	17	U.S.A.
6EB8	6.3	0.8	200	25.0	125	7.0	68Ω	75	12.6	B9A	19	U.S.A.
6EH8	6.3	0.45	125	12.0	125	4.0	1.0	170	6.0	B9A	18	U.S.A.
6F19	Vari-mu	6.3	0.3	250	8.0	85	2.0	1.8	500	5.7	B9A	20	Ediswan
6F20	Vari-mu	6.3	0.3	170	10.0	170	2.5	2.0	—	6.0	B9A	2	Ediswan
6F22		6.3	0.2	250	3.0	140	0.55	2.0	—	1.85	B9A	25	Ediswan
6F23		6.3	0.34	170	10.0	170	2.6	1.8	—	8.8	B9A	30	Ediswan
6F40		6.3	0.2	250	3.0	140	0.55	2.0	—	2.0	B9A	21	Czech
6FD12	Vari-mu	6.3	0.2	250	9.0	100	2.7	2.0	1000	3.8	B9A	14	Czech
6RP10		6.3	0.5	150	36.0	150	8.5	60Ω	—	13.5	B9A	22	Japanese
6RR8		6.3	0.3	150	13.0	150	4.5	110Ω	—	12.5	B9A	23	Japanese
6U8A		6.3	0.45	250	10.0	110	3.5	1.0	400	5.2	B9A	17	U.S.A.
6X8A		6.3	0.45	150	4.6	150	1.1	3.5	—	1.6	B9A	24	U.S.A.
8AU8A		8.4	0.45	200	15.0	125	3.4	82Ω	150	7.0	B9A	9	U.S.A.
8AW8A		8.4	0.45	200	13.0	150	3.5	180Ω	400	9.0	B9A	9	U.S.A.
8BA8A		8.4	0.45	200	13.0	150	3.5	180Ω	400	9.0	B9A	9	U.S.A.
8BH8		8.4	0.45	200	15.0	125	3.4	82Ω	150	7.0	B9A	9	U.S.A.
8CX8		8.0	0.6	200	24.0	125	5.2	68Ω	70	10.0	B9A	9	U.S.A.
8D8		6.3	0.2	250	3.0	140	0.55	2.0	2500	1.85	B9A	25	Brimar
8EB8		8.0	0.6	200	25.0	125	7.0	68Ω	75	12.5	B9A	19	U.S.A.
9BR8		9.45	0.3	250	10.0	110	3.5	68Ω	400	5.2	B9A	26	U.S.A.
9CL8		9.5	0.3	125	12.0	125	4.0	1.0	100	5.8	B9A	16	U.S.A.
9D7		6.3	0.3	250	10.0	100	3.3	100Ω	750	8.4	B9A	20	Brimar
9U8A		9.5	0.3	250	10.0	110	3.5	1.0	400	5.2	B9A	17	U.S.A.
9X8		9.5	0.3	150	4.6	150	1.1	3.5	—	1.6	B9A	24	U.S.A.
10C8		10.5	0.3	135	11.5	135	3.2	100Ω	190	8.0	B9A	7	U.S.A.
10EB8		10.5	0.45	200	25.0	125	7.0	68Ω	75	12.5	B9A	19	U.S.A.
10F18		13.0	0.1	175	12.0	100	3.4	1.3	—	4.5	B9A	20	Ediswan
10FD12		19.0	0.1	250	9.0	100	2.7	2.0	1000	3.8	B9A	14	Ediswan
12AD5		12.6	0.1	100	6.0	100	1.75	2.5	600	2.2	B9A	27	U.S.A.
12AL8		12.6	0.45	12.6	25.0	12.6	—	0.8	1	8.0	B9A	28	U.S.A.
12AU8		12.6	0.3	200	15.0	125	3.4	82Ω	150	7.0	B9A	9	Fivre
12CT8		12.6	0.3	200	15.0	125	3.4	82Ω	150	7.0	B9A	7	U.S.A.
12DE8		12.6	0.2	12.6	1.3	12.6	0.5	0.8	300	1.5	B9A	29	U.S.A.
12DK5		12.6	0.3	12.6	2.0	12.6	0.65	0	100	3.3	B9A	30	U.S.A.
12DK7		12.6	0.5	12.6	6.0	12.6	1.0	2MΩ	4	5.0	B9A	32	U.S.A.
12DQ7		6.3	0.6	200	26.0	125	5.6	68Ω	53	10.5	B9A	32	U.S.A.
		12.6	0.3										
12DS7		12.6	0.4	12.6	40.0	12.6	8.0	2.0	—	—	B9A	33	U.S.A.
12DV8		12.6	0.375	12.6	9.0	12.6	—	18Ω	0.9	8.5	B9A	34	U.S.A.
12DY8		12.6	0.35	12.6	14.0	12.6	2.0	2.2MΩ	5	6.0	B9A	35	U.S.A.
12EC8		12.6	0.225	12.6	0.66	12.6	0.28	33KΩ	750	2.0	B9A	26	U.S.A.
12EM6		12.6	0.5	12.6	6.0	12.6	1.0	2MΩ	4	5.0	B9A	36	U.S.A.
17C8	Vari-mu	17	0.1	170	5.0	85	1.75	2.0	900	2.2	B9A	37	U.S.A.
30C13		9	0.3	170	10.0	170	2.8	2.0	400	6.2	B9A	38	U.S.A.
50BM8		50.0	0.1	200	35.0	200	7.0	16.0	20	6.4	B9A	39	U.S.A.

SCREENED TETRODES and PENTODES—Contd.

Type	FILAMENT or HEATER Volts	Amps	ANODE Volts	I/mA	SCREEN Volts	I/mA	Neg. Grid Volts	ra KΩ	gm mA/V	BASE Type	Ref.	Maker
6486/A	6.3	0.25	120	3.5	120	3.3	2.0	—	3.25	B9A	40	U.S.A.
6582/A	6.3	0.25	120	7.5	120	2.5	180Ω	500	4.5	B9A	41	U.S.A.
6678	6.3	0.45	250	10.0	110	3.5	68Ω	400	5.2	B9A	17	U.S.A.
6688	6.3	0.3	180	13.0	150	3.0	1.1	35	16.5	B9A	42	U.S.A.

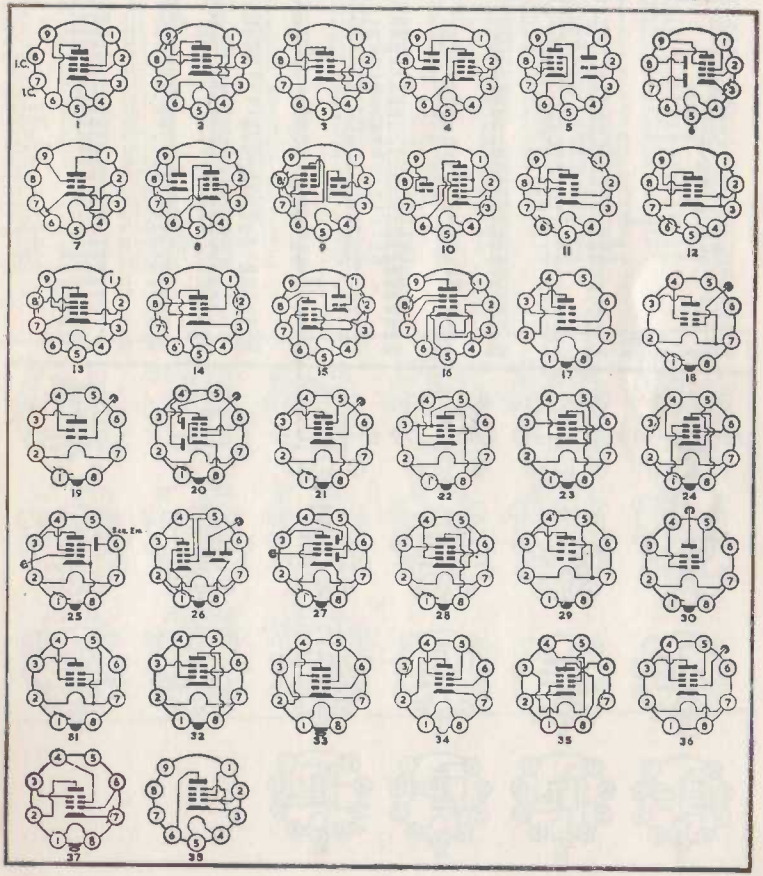


SCREENED TETRODES and PENTODES—Contd.

Type	FILAMENT or HEATER Volts	FILAMENT or HEATER Amps	ANODE Volts	ANODE I/mA	SCREEN Volts	SCREEN I/mA	Neg. Grid Volts	ra KΩ	gm mA/V	BASE Type	Ref.	Maker
6689	6.3	0.3	210	10.0	120	2.2	165Ω	400	9.0	B9A	1	U.S.A.
6870	6.3	0.6	250	25.0	250	3.5	120Ω	230	8.5	B9A	2	U.S.A.
	12.6	0.3										
7054	13.5	0.275	250	19.0	150	3.5	120Ω	100	11.5	B9A	3	U.S.A.
7059	13.5	0.195	250	10.0	110	3.5	68Ω	400	5.2	B9A	4	U.S.A.
7060	13.5	0.28	200	15.0	125	3.4	82Ω	150	7.0	B9A	5	U.S.A.
7125	Vari-mu	6.3	0.2	250	9.0	100	2.7	2.0	1000	3.8	B9A	6	U.S.A.
7150		6.3	0.45	135	26.0	135	10.0	260Ω	40	34.0	B9A	?	U.S.A.
7199		6.3	0.45	220	12.5	130	3.5	62Ω	400	7.0	B9A	?	U.S.A.
7258		12.5	0.21	125	12.0	125	3.8	56Ω	170	7.8	B9A	5	U.S.A.
A1600		6.3	0.45	135	26.0	135	10.0	+8	—	34.0	B9A	7	Ericsson
D3a		6.3	0.32	190	22.0	160	5.8	0	—	35.0	B9A	13	European
E80CF		6.3	0.38	170	10.0	170	2.8	155Ω	400	6.2	B9A	8	European
EBF83		6.3	0.3	12.6	0.45	12.6	0.14	2.2MΩ	1000	1.0	B9A	6	European
ECF82		6.3	0.45	250	10.0	110	3.5	1.0	400	5.2	B9A	4	European
ECF83		6.3	0.4	60	3.0	50	1.25	2.3	600	1.3	B9A	9	European
ECH83		6.3	0.3	12.6	0.17	12.6	0.3	1MΩ	1500	0.22	B9A	10	European
EF89F		6.3	0.3	250	11.0	100	4.2	2.0	1000	4.4	B9A	11	European
EF806S		6.3	0.2	250	3.2	140	0.6	500Ω	2500	2.0	B9A	14	European
EF860		6.3	0.3	250	10.0	250	2.8	3.5	650	6.8	B9A	12	E. Europn.
EF861		6.3	0.3	180	13.0	150	3.0	1.1	35	16.5	B9A	13	E. Europn.
LZ329		9.0	0.3	170	10.0	170	2.8	2.0	400	6.2	B9A	4	G.E.C.
M8195		6.3	0.2	250	3.0	140	0.55	2.0	2500	1.85	B9A	14	Mullard
PCF84		9.0	0.3	170	8.0	170	2.7	0	—	2.5	B9A	15	Europear
PTT217		6.3	0.3	150	12.5	150	3.3	120Ω	100	16.0	B9A	16	French
R150		6.3	0.3	150	12.5	150	3.3	120Ω	100	16.0	B9A	16	French
TS53		18.0	0.1	210	10.0	120	2.1	165Ω	400	9.0	B9A	1	European
TS54		6.3	0.3	210	10.0	120	2.2	165Ω	400	9.0	B9A	1	European
UCF80		27.0	0.1	170	10.0	170	2.8	2.0	400	6.2	B9A	8	European
UF81	Vari-mu	12.6	0.1	250	6.0	125	1.7	2.5	1000	2.2	B9A	38	European
UF86		12.6	0.1	200	3.0	140	0.6	2.0	2500	1.8	B9A	14	European
W119	Vari-mu	13	0.1	175	12.0	100	3.4	1.3	—	4.5	B9A	12	G.E.C.
W739		6.3	0.2	175	12.0	100	3.4	1.3	—	4.5	B9A	12	G.E.C.
Z329		7.3	0.2	170	10.0	170	2.6	1.85	—	8.5	B9A	12	G.E.C.
1LB7		1.4	0.05	45	1.0	45	0	3.0	300	0.3	I.O.	17	Japanese
2Ж2М		2.0	0.06	120	1.0	70	0.3	1.0	1500	0.8	I.O.	18	Soviet
2Ж1М		2.0	0.125	120	3.5	70	0.7	1.0	1000	1.4	I.O.	18	Soviet
2Ж2М		2.0	0.06	100	2.4	100	0.5	2.0	800	0.8	I.O.	19	Soviet
6F10		6.3	0.45	250	10.0	150	2.5	2.0	1000	9.0	I.O.	28	Czech
6B8C		6.3	0.3	250	10.0	125	3.0	3.0	700	1.5	I.O.	20	Soviet
6Ж2М		6.3	0.45	300	10.0	150	1.5	2.0	750	9.0	I.O.	21	Soviet
6Ж3		6.3	0.3	250	10.8	150	4.3	1.0	900	4.9	I.O.	22	Soviet
6Ж3М		6.3	0.45	300	12.5	200	1.8	3.0	700	5.0	I.O.	21	Soviet
6Ж4		6.3	0.45	300	10.2	150	2.5	2.0	750	9.0	I.O.	23	Soviet
6Ж6М		6.3	0.3	250	2.0	100	0.8	3.0	1500	1.2	I.O.	21	Soviet
6Ж7		6.3	0.3	250	2.0	100	0.5	3.0	1000	1.2	I.O.	21	Soviet
6Ж8		6.3	0.3	250	3.0	100	0.8	3.0	1500	1.65	I.O.	23	Soviet
6К3		6.3	0.3	250	9.25	100	2.5	3.0	800	2.4	I.O.	23	Soviet
6К4		6.3	0.3	250	9.2	150	3.4	2.5	1000	4.0	I.O.	22	Soviet
6К7		6.3	0.3	250	7.0	100	1.7	3.0	800	1.45	I.O.	21	Soviet
6К9С		6.3	0.3	250	9.25	100	2.6	3.0	—	2.0	I.O.	21	Soviet
6П9		6.3	0.65	300	30.0	150	6.5	3.0	130	11.7	I.O.	24	Soviet
6ФУ6		6.3	0.67	250	10.0	100	0.7	15.0	100	10.0	I.O.	25	Soviet
12Б1М		12.5	0.22	25	1.1	25	0.4	1.0	7.5	1.9	I.O.	26	Soviet
12В2М		12.5	0.15	25	1.3	25	0.3	1.0	150	0.8	I.O.	27	Soviet
12Ж1М		12.5	0.225	25	2.0	25	0.5	1.5	200	1.4	I.O.	21	Soviet
12К8		12.5	0.15	250	3.0	100	0.8	3.0	—	1.65	I.O.	23	Soviet
12К1М		12.5	0.225	25	2.0	25	0.5	1.5	200	1.4	I.O.	21	Soviet
12К3		12.5	0.15	250	9.25	100	2.5	3.0	—	2.0	I.O.	23	Soviet
12К4		12.6	0.15	250	9.2	150	3.4	2.5	1000	4.0	I.O.	22	Soviet
6888		6.3	0.6	150	375	90	19.0	Gated amp.			I.O.	32	U.S.A.
СВ24т		2.0	0.125	120	4.5	70	1.1	0.5	1000	1.2	I.O.	18	Soviet
C0241		2.0	0.125	120	3.5	70	1.0	1.0	1100	1.4	I.O.	18	Soviet
C0244		2.0	0.185	120	4.1	120	0.75	2.5	150	1.8	I.O.	29	Soviet
C0257		2.0	0.25	100	6.0	100	1.5	3.0	1500	2.5	I.O.	30	Soviet
C0258		1.8	0.32	160	10.0	120	1.7	6.0	80	2.0	I.O.	31	Soviet
R116		10.0	0.55	200	8.0	200	1.6	2.2	1000	5.5	I.O.	21	French
6F24		6.3	0.495	250	15.0	200	1.9	2.1	300	10.5	B8G	33	Czech
18F24		18.9	0.165	250	15.0	200	1.9	2.1	300	10.5	B8G	33	Czech
C3m		20.0	0.125	220	16.0	150	3.2	250Ω	250	6.5	B8G	37	European
W118	Vari-mu	13.0	0.1	175	7.0	100	2.0	2.5	1000	2.4	B8A	34	G.E.C.
PTT202S		18.0	0.085	200	8.0	200	1.6	2.2	800	5.5	F8A	35	French
PTT203		18.0	0.1	200	10.5	200	2.0	1.6	500	8.5	F8A	?	French
PTT206P		18.0	0.4	200	35.0	200	5.0	5.0	43	8.5	F8A	?	French
PTT2_2P		6.3	0.24	200	8.0	200	1.6	230Ω	800	5.5	F8A	35	French
PTT213P		6.0	0.31	200	10.5	200	2.0	1.6	500	8.5	F8A	?	French

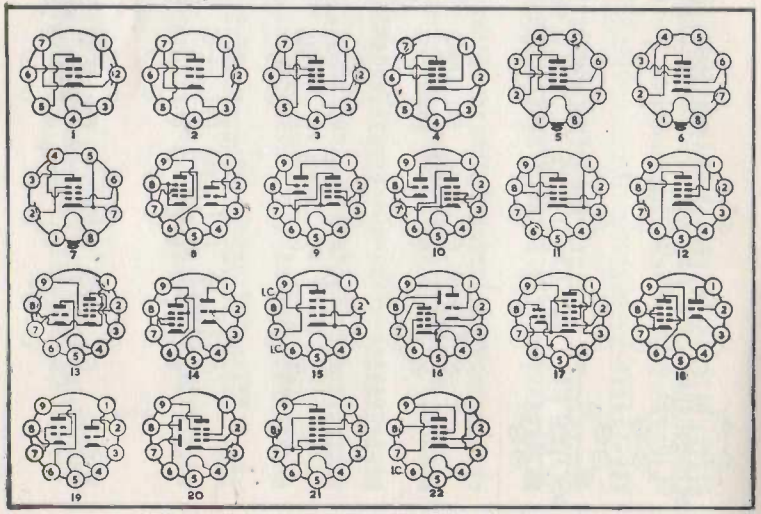
SCREENED TETRODES and PENTODES—Contd.

Type	FILAMENT or HEATER Volts	FILAMENT or HEATER Amps	ANODE Volts	ANODE I/mA	SCREEN Volts	SCREEN I/mA	Neg. Grid Volts	ra KΩ	gm mA/V	BASE Type	Ref.	Maker
PTT214P	6.3	0.3	150	12.3	150	3.7	1.75	200	13.5	F8A	?	French
PTT216	6.3	0.3	150	12.3	150	3.7	1.75	200	13.5	F8A	?	French
PTT241P	6.3	0.79	220	34.0	220	4.5	2.9	34	12.5	F8A	?	French
PTT243P	6.3	0.42	150	26.0	150	6.5	1.5	50	28.0	F8A	?	French
PTT301A	18.5	0.2	80	2.0	80	0.5	2.13	500	3.5	F8A	?	French
R122N	18.0	0.225	200	8.0	200	1.6	2.2	1000	5.5	F8A	36	French
R126F	18.0	0.225	200	6.0	200	1.3	4.0	1000	1.7	F8A	36	French
R142	6.3	0.3	200	10.5	200	2.0	1.6	500	8.5	F8A	35	French
R143	6.3	0.24	200	8.0	200	1.6	230Ω	800	5.5	F8A	35	French
R145	18.0	0.085	200	8.0	200	1.6	2.2	800	5.5	F8A	35	French
M8140	6.3	0.175	150	7.0	140	2.2	3.0	420	4.3	None	—	Mullard
M8180	6.3	0.3	250	10.0	250	2.5	2.0	1000	7.6	None	—	Mullard

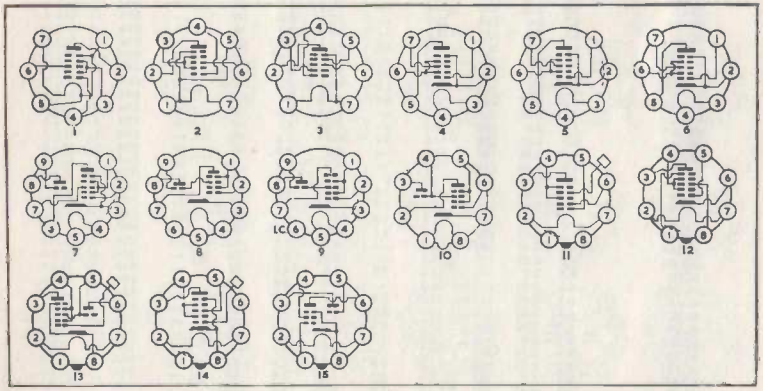


SCREENED TETRODES and PENTODES—Contd.

Type		FILAMENT or HEATER Volts	Amps	ANODE Volts	1/mA	SCREEN Volts	1/mA	Neg. Grid Volts	ra KΩ	gm mA/V	BASE Type	Ref.	Maker
2EV5		2.4	0.6	250	11.5	80	0.9	—	150	8.8	B7G	1	U.S.A.
2FV6		2.4	0.6	125	10	80	1.5	1.0	100	8.0	B7G	2	U.S.A.
3EV5		2.9	0.45	250	11.5	80	0.9	—	150	8.8	B7G	1	U.S.A.
6ES6	Vari-mu	6.3	0.3	12.6	3.0	6.3	1.1	0.7	150	1.9	B7G	3	U.S.A.
6EV5		6.3	0.2	250	11.5	80	0.9	—	150	8.8	B7G	1	U.S.A.
6FV6		6.3	0.2	125	10	80	1.5	1.0	100	8.0	B7G	2	U.S.A.
12BZ6		12.6	0.15	200	11	150	2.6	180Ω	600	6.1	B7G	4	U.S.A.
5A/180M		6.3	0.45	180	26	150	6	315Ω	—	32.0	B8G	5	S.T.C.
C3a		6.3	0.4	220	16	150	3.0	250Ω	250	6.5	B8G	6	European
C3g		6.3	0.37	220	13	150	3.3	115Ω	320	14.0	B8G	7	European
5FV8		4.7	0.6	125	12	125	4.6	1.0	200	6.5	B9A	8	U.S.A.
5GH8		4.7	0.6	125	12	125	4.0	1.0	200	7.5	B9A	9	U.S.A.
6C16		6.3	0.45	170	10	170	2.8	2.0	400	6.2	B9A	10	Ediswan
6EC7		6.3	0.2	175	12	100	3.5	1.3	220	—	B9A	11	U.S.A.
6F22		6.3	0.2	250	3.0	140	0.55	2.0	2500	1.85	B9A	12	Ediswan
6FV8		6.3	0.45	125	12	125	4.6	1.0	200	6.5	B9A	8	U.S.A.
6GH8		6.3	0.45	125	12	125	4.0	1.0	200	7.5	B9A	9	U.S.A.
7ED7		7.3	0.3	170	10	170	2.6	1.9	—	—	B9A	11	U.S.A.
9EN7		9.0	0.3	200	7.6	138	2.3	—	—	8.5	B9A	13	U.S.A.
9GB8		9.4	0.3	250	12	250	—	—	—	—	B9A	14	U.S.A.
12FB5		12.6	0.3	170	31	180	7.3	10.3	—	—	B9A	15	U.S.A.
12FR8		12.6	0.32	12.6	1.9	12.6	0.7	0.7	400	2.7	B9A	16	U.S.A.
12FX8		12.6	0.3	12.6	0.029	12.6	1.25	0.5	500	0.3	B9A	17	U.S.A.
13EC7		13.0	0.1	175	12	100	3.5	1.3	220	—	B9A	11	U.S.A.
13GC8		13.0	0.3	250	18	250	5.0	—	5.3	—	B9A	18	U.S.A.
19BW7		20.0	0.1	170	10.0	170	2.5	2.0	400	7.2	B9A	11	U.S.A.
19BX6		20.0	0.1	170	10.0	170	2.5	2.0	400	7.2	B9A	11	U.S.A.
19CL8A		18.9	0.15	125	12.0	125	4.0	1.0	100	5.8	B9A	19	U.S.A.
19DC8	Vari-mu	19.0	0.1	250	9	100	2.7	2.0	1000	3.8	B9A	20	U.S.A.
19EA8A		18.9	0.15	125	12.0	125	4.0	1.0	80	6.4	B9A	9	U.S.A.
27BL8		27.0	0.1	170	10	170	2.8	2.0	400	6.2	B9A	10	U.S.A.
30C15		9.0	0.3	200	7.6	138	2.3	—	—	8.5	B9A	13	Ediswan
E81H		6.3	0.3	250	6	100	9	0	600	1.0	B9A	21	E. European
E280F		6.3	0.32	190	20	160	6	370Ω	100	26.0	B9A	22	European
EF183		6.3	0.3	200	12	90	4.2	—	500	12.5	B9A	11	European
EF184		6.3	0.3	200	10	200	3.8	—	350	15.0	B9A	11	European
EH81		6.3	0.3	250	6	100	9	0	600	1.0	B9A	21	European
PF83	Vari-mu	4.5	0.3	50	1.85	50	0.54	2.0	AF Pre amp.		B9A	12	E. European
WD119	Vari-mu	19.0	0.1	250	9.0	100	2.7	2.0	1000	3.8	B9A	20	G.E.C.



Type		FILAMENT or HEATER Volts.	Amps.	ANODE Volts.	1/mA	SCREEN Volts.	1/mA	Osc. Volts.	Neg. Anode 1m/A	Grid Volts.	ra MΩ	gc mA/V	BASE Type	Ref.	Maker
1A1Π	(hep)	1.2	0.05	60	0.4	45	1.9	—	—	12	1.5	0.19	B7G	1	Soviet
1AQ5	(hep)	1.4	0.025	90	2.5	45	0.64	—	—	0	0.8	0.25	B7G	1	Japanese
1H33	(hep)	1.4	0.025	90	1.6	67.5	3.2	—	—	7.0	0.6	0.3	B7G	2	Czech
1H34	(hep)	1.2	0.03	90	1.6	67.5	3.2	—	—	7.0	0.6	0.3	B7G	2	Czech
1H35	(hep)	1.4	0.025	85	0.6	35	1.5	4	—	—	1.0	0.3	B7G	3	Czech
4BE6	(hep)	4.2	0.45	200	3.0	100	7.1	—	—	1.5	1.0	0.47	B7G	4	U.S.A.
6H31	(hep)	6.3	0.3	250	3.0	100	7.1	1.5	—	—	1.0	0.475	B7G	4	Czech
A62Π	(hep)	6.3	0.3	250	7.0	100	0.47	—	—	1.5	1.0	0.47	B7G	4	Soviet
12FA6	(hep)	12.6	0.15	12.6	0.67	12.6	1.2	—	—	0.85	—	0.3	B7G	5	U.S.A.
12H31	(hep)	12.6	0.15	250	3.0	100	7.1	1.5	—	—	1.0	0.475	B7G	4	Czech
18FX6	(hep)	18.0	0.1	100	2.3	100	6.2	—	—	1.5	0.4	0.48	B7G	6	U.S.A.
6687	(hep)	6.3	0.27	150	0.2	75	—	—	—	10	—	—	B7G	4	U.S.A.
DK962	(hep)	1.2	0.06	67.5	1.2	67.5	3.7	67.5	—	2.5	—	0.95	B7G	3	European
X20	(hep)	1.4	0.05	85	0.65	30	1.65	—	—	0	1.0	0.325	B7G	3	G.E.C.
X25	(hep)	1.4	0.025	65	0.7	35	1.65	—	—	0	1.0	0.3	B7G	3	G.E.C.
6C12	(t/hep)	6.3	0.3	250	3.25	103	6.7	100	4.5	2	1.0	0.775	B9A	7	Ediswan
6DS8	(t/hep)	6.3	0.3	12.6	0.17	12.6	0.3	12.6	—	1.7	1.5	0.22	B9A	7	U.S.A.
10C14	(t/hep)	19.0	0.1	250	3.25	103	6.7	100	4.5	2	1.0	0.775	B9A	7	Ediswan
14Y7	(t/hex)	14.0	0.1	100	10	—	—	—	—	0	—	—	B9A	8	U.S.A.
20D4	(t/hep)	6.3	0.3	250	7.0	100	2.3	100	4.5	2	0.9	0.775	B9A	7	Ediswan
ECH83	(t/hep)	6.3	0.3	12.6	0.17	12.6	0.3	12.6	—	1.7	1.5	0.22	B9A	7	European
UCH80	(t/hex)	14.5	0.1	250	3.0	85	3.0	82	5.1	2.0	1.0	0.75	B9A	9	European
X119	(t/hep)	19.0	0.1	250	3.25	103	6.7	100	4.5	2	1.0	0.775	B9A	7	G.E.C.
ECH113	(t/hex)	6.3	0.3	250	3.0	85	3.0	100	4.8	2	1.0	0.75	B8A	10	European
X118	(t/hep)	28.0	0.1	175	2.5	100	6.0	80	5	2.5	2.2	0.65	B8A	10	G.E.C.
2A1M	(hep)	2.0	0.16	120	2.2	70	2.2	—	—	0	150	0.45	I.O.	11	Soviet
6A10C	(hep)	6.3	0.3	250	3.5	100	8.2	—	—	0	800	0.45	I.O.	12	Soviet
6Ж7	(t/hep)	6.3	0.3	250	2.7	100	4.6	100	—	3	600	0.35	I.O	13	Soviet
6Ж1M	(hep)	6.3	0.3	250	2.4	100	7.1	—	—	3	1000	0.38	I.O.	14	Soviet
12M1M	(t/pen)	12.5	0.225	25	1.1	25	0.3	—	—	1	7.5	—	I.O.	15	Soviet
CB242	(hep)	2.0	0.15	120	5.0	70	5.0	—	—	0	200	0.4	I.O.	11	Soviet
EH171	(hex)	6.3	0.32	250	—	100	—	100	—	2.0	—	—	No details		European
UH171	(hex)	20.0	0.1	250	—	100	—	100	—	2.0	—	—	No details		European

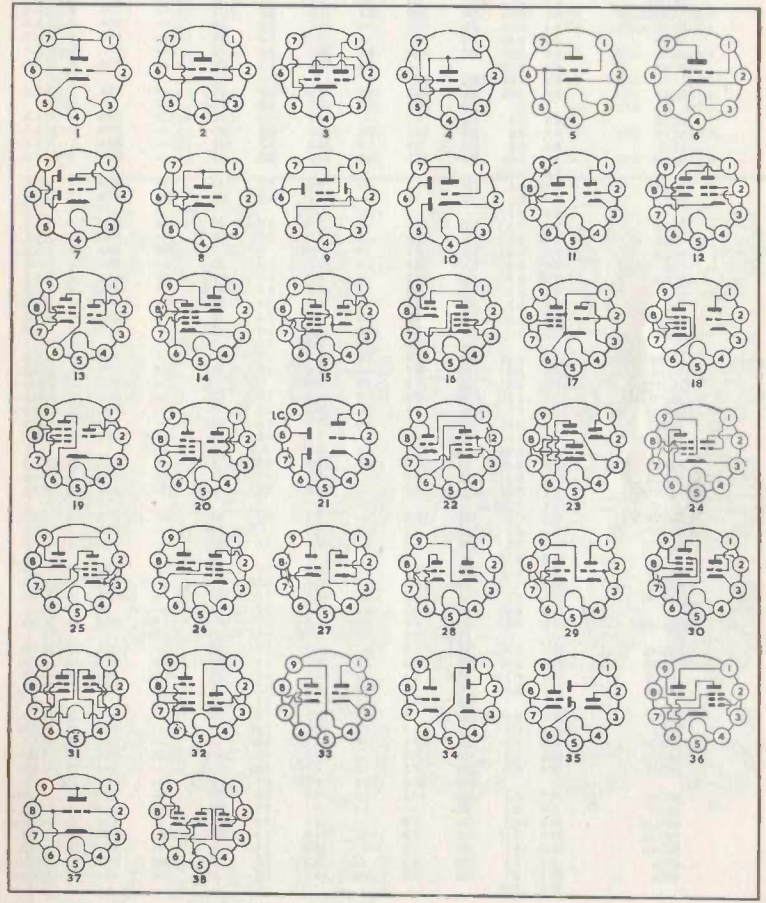


TRIODE AMPLIFIERS

Type	FILAMENT or HEATER Volts	FILAMENT or HEATER Amps	ANODE Volts	ANODE I/mA	Neg. Grid Volts	ra Ω	gm mA/V	Amp Factor	RK Ω	BASE Type	BASE Ref.	Maker
2BN4A	2.35	0.6	150	9.0	—	5.4	8.0	43	220	B7G	2	U.S.A.
3AF4A	3.2	0.45	80	16.0	—	2.2	6.6	15	150	B7G	1	U.S.A.
3BN4	2.8	0.45	150	9.0	—	6.3	6.8	43	220	B7G	2	U.S.A.
3BN4A	3.0	0.45	150	9.0	—	5.4	8.0	43	220	B7G	2	U.S.A.
4BN4	4.2	0.3	150	9.0	—	6.3	6.8	43	220	B7G	2	U.S.A.
6AQ6	6.3	0.15	250	1.0	3.0	58	1.2	70	—	B7G	9	U.S.A.
6BC32	6.3	0.3	250	1.0	2.0	62.5	1.6	100	—	B7G	9	Czech
6BN4A	6.3	0.2	150	9.0	—	5.4	8.0	43	220	B7G	2	U.S.A.
6BS4	6.3	0.225	100	16.0	4.0	1.9	8.0	15	—	B7G	1	U.S.A.
6C31	6.3	0.4	150	10.0	—	4.5	12	55	200	B7G	5	Czech
6CC31	6.3	0.45	200	6.0	—	12	3.1	37	400	B7G	3	Czech
6J6A	6.3	0.33	100	8.5	0.65	7.1	5.3	38	—	B7G	3	U.S.A.
6C1II	6.3	0.15	250	6.3	7.0	11.4	2.2	26	—	B7G	4	Soviet
6C2II	6.3	0.4	100	10.0	—	5.0	11.0	55	100	B7G	5	Soviet
6H15II	6.3	0.45	100	8.5	2.0	7.1	5.6	39	50	B7G	3	Soviet
12AJ6	12.6	0.15	12.6	0.75	0	45	1.2	55	—	B7G	6	U.S.A.
12BC32	12.6	0.15	250	1.0	2.0	62.5	1.6	100	—	B7G	9	Czech
12EL6	12.6	0.15	12.6	0.75	0	45	1.2	55	—	B7G	7	U.S.A.
12FK6	12.6	0.15	12.6	1.3	—	6.2	1.2	7.5	2.2M	B7G	10	U.S.A.
12FM6	12.6	0.15	12.6	1.0	—	7	1.3	10	—	B7G	10	U.S.A.
12FT6	12.6	0.15	12.6	2.0	0	7.6	1.9	15	—	B7G	10	U.S.A.
18FY6	18.0	0.1	100	0.6	1.0	77.0	1.3	100	—	B7G	9	U.S.A.
6099	6.3	0.45	100	8.5	—	7.1	5.3	38	50	B7G	3	U.S.A.
6927	6.3	0.33	130	7.7	—	7.2	5.3	38	100	B7G	3	U.S.A.
7137	6.3	0.225	150	13.5	—	4.7	8.5	40	100	B7G	5	U.S.A.
7244	6.3	0.45	100	9.0	—	6.3	6.0	37.8	50	B7G	3	U.S.A.
7245	6.3	0.4	150	13.5	—	4.5	11.0	50	100	B7G	5	U.S.A.
EC903	6.3	0.2	100	16.0	4.0	1.9	8.0	15	—	B7G	1	European
ECC960	6.3	0.4	100	5.6	0	—	6	—	—	B7G	3	European
ECC962	6.3	0.4	100	8.5	1.7	8.3	6	50	—	B7G	3	European
M8080	6.3	0.15	250	10.5	8.5	7.7	2.2	17	—	B7G	8	Mullard
TS52	6.3	0.45	100	8.5	0.85	7.1	5.3	38	—	B7G	3	European
4CM4	3.6	0.3	175	12.0	1.5	5.0	14.0	70	—	B9A	37	U.S.A.
4ES8	4.0	0.6	90	15.0	1.2	—	12.5	—	—	B9A	11	U.S.A.
5BQ7A	5.6	0.45	150	9.0	—	6.1	6.4	39	220	B9A	11	U.S.A.
5BS8	5.6	0.45	150	10.0	—	5.0	7.2	36	220	B9A	11	U.S.A.
5BX7	5.6	0.45	150	10.0	—	5.6	6.8	38	220	B9A	11	U.S.A.
5BZ7	5.6	0.45	150	10.0	—	5.6	6.8	38	220	B9A	11	U.S.A.
5CL8A	4.7	0.6	125	15.0	—	5.0	8.0	40	—	B9A	13	U.S.A.
5CQ8	4.7	0.6	125	15.0	—	5.0	8.0	40	56	B9A	12	U.S.A.
5CR8	4.7	0.6	125	12.0	2.0	5.5	4.0	22	—	B9A	14	U.S.A.
5DH8	5.2	0.6	250	7.3	—	12	4.45	53	390	B9A	15	U.S.A.
5EA8	4.7	0.6	150	18.0	—	5.0	8.5	42.5	56	B9A	16	U.S.A.
5EH8	4.7	0.6	125	13.5	1.0	5.3	7.5	40.0	—	B9A	17	U.S.A.
6AN8A	6.3	0.45	200	13.0	6.0	5.75	3.3	19	—	B9A	18	U.S.A.
6AT8A	6.3	0.45	100	8.5	—	6.9	5.8	40	100	B9A	19	U.S.A.
6AU8A	6.3	0.6	150	8.5	—	8.2	4.9	40	150	B9A	20	U.S.A.
6BD7A	6.3	0.23	250	1.0	3.0	58.0	1.2	70	—	B9A	21	U.S.A.
6BE8A	6.3	0.45	150	18.0	—	5.0	8.5	42	56	B9A	15	U.S.A.
6BK7B	6.3	0.45	150	18.0	—	4.6	9.3	43	56	B9A	11	U.S.A.
6BM8	6.3	0.75	100	3.0	0	33.0	2.2	70	—	B9A	22	U.S.A.
6BN8	6.3	0.6	250	1.6	3.0	28.0	2.5	70	—	B9A	23	U.S.A.
6CC40	6.3	0.45	250	10.5	8.5	7.7	2.2	17	—	B9A	11	Czech
6CC41	6.3	0.3	250	2.3	1.5	50	2	100	200	B9A	11	Czech
6CC42	6.3	0.35	150	8.0	2.0	9.5	5.25	55	240	B9A	31	Czech
6CG8A	6.3	0.45	100	8.5	—	6.9	5.8	40	100	B9A	24	U.S.A.
6CL8A	6.3	0.45	125	15.0	—	5.0	8.0	40	—	B9A	13	U.S.A.
6CM4	6.3	0.2	175	12.0	1.5	5.0	14.0	70	—	B9A	37	U.S.A.
6CQ8A	6.3	0.45	125	15.0	—	5.0	8.0	40	56	B9A	12	U.S.A.
6CR8	6.3	0.45	125	12.0	2.0	4.0	5.5	22	—	B9A	14	U.S.A.
6CS8	6.3	0.45	125	12.0	2.0	4.0	5.5	22	—	B9A	25	U.S.A.
6CU8	6.3	0.45	200	13.0	6.0	5.75	3.3	19	—	B9A	26	U.S.A.
6CW7	6.3	0.4	90	12.0	1.5	3.7	6.2	23	—	B9A	27	U.S.A.
6CX8	6.3	0.75	150	9.2	—	8.7	4.4	40	150	B9A	20	U.S.A.
6CY7	6.3	0.75	250	1.2	3.0	52.0	1.3	68	—	B9A	28	U.S.A.
6DA7	6.3	1.0	250	9.0	8.0	7.7	2.6	20	—	B9A	28	U.S.A.
6DE7	6.3	0.95	250	5.5	11.0	8.75	2.0	17.5	—	B9A	29	U.S.A.
			150	35.0	17.5	0.925	6.5	6	—			
6DJ8	6.3	0.365	90	15.0	1.3	2.64	12.5	33	—	B9A	11	U.S.A.
6DR7	6.3	0.9	250	1.4	3.0	40	1.6	68	—	B9A	28	U.S.A.
6DT8	6.3	0.3	250	10.0	—	10.5	5.5	60	—	B9A	11	U.S.A.
6DX8	6.3	0.71	200	3.0	1.7	16.25	4.0	65	—	B9A	30	U.S.A.
6DZ8	6.3	0.9	120	0.8	—	70.0	1.4	100	1500	B9A	22	U.S.A.
6EA8	6.3	0.45	150	18.0	—	5.0	8.5	42.5	56	B9A	16	U.S.A.
6EB8	6.3	0.75	250	2.0	2.0	36.0	2.7	100	—	B9A	32	U.S.A.
6EH8	6.3	0.45	125	13.5	1.0	5.3	7.5	40	—	B9A	17	U.S.A.
6ES8	6.3	0.365	90	15.0	1.2	—	12.5	—	—	B9A	11	U.S.A.

TRIODE AMPLIFIERS—Contd.

Type	FILAMENT or HEATER Volts	FILAMENT or HEATER Amps	ANODE Volts	ANODE I/mA	Neg. Grid Volts	ra Ω	gm mA/V	Amp Factor	RK Ω	BASE Type	BASE Ref.	Maker
6EZ8	6.3		125	4.2	1.0	13.5	4.2	57	—	B9A	38	U.S.A.
6L12	6.3	0.45	200	11.0	2.0	7.0	6.8	48	—	B9A	11	Ediswan
6L13	6.3	0.3	250	1.2	2.0	62.5	1.6	100	—	B9A	33	Ediswan
	12.6	0.15										
6LD12	6.3	0.45	250	1.0	3.0	58.0	1.2	70	—	B9A	34	Ediswan
6LD13	6.3	0.2	250	1.0	3.0	58.0	1.2	70	—	B9A	21	Ediswan
6T8A	6.3	0.45	250	1.0	3.0	58.0	1.2	70	—	B9A	35	U.S.A.
6U8A	6.3	0.45	150	18.0	—	5.0	8.5	42.5	56	B9A	36	U.S.A.

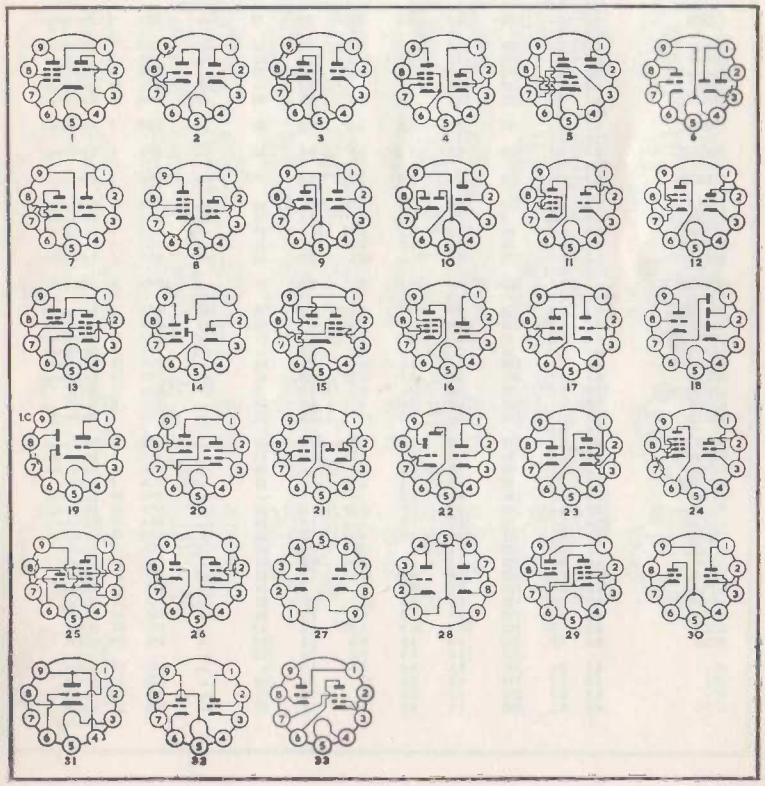


TRIODE AMPLIFIERS—Contd.

Type	FILAMENT or HEATER Volts	Amps	ANODE Volts	I/mA	Neg. Grid Volts	rₐ Ω	gm mA/V	Amp Factor	RK Ω	BASE Type	Ref.	Maker
6X8A	6.3	0.45	150	18.0	—	6.9	5.8	40	2.7K	B9A	1	U.S.A.
6H1Π	6.3	0.6	250	8.0	—	8.0	4.3	35	600	B9A	2	Soviet
6H2Π	6.3	0.3	250	2.3	1.5	50.0	2.0	100	—	B9A	3	Soviet
	12.6	0.15										
7DJ8	7.0	0.3	90	15.0	1.3	2.6	12.5	33	—	B9A	2	U.S.A.
8AU8A	8.4	0.45	150	9.3	—	8.2	4.9	40	150	B9A	4	U.S.A.
8AW8A	8.4	0.45	200	4.0	2.0	17.5	4.0	70	—	B9A	4	U.S.A.
8BA8/A	8.4	0.45	200	8.0	—	6.7	2.7	18	—	B9A	4	U.S.A.
8BH8	8.4	0.45	150	9.5	—	5.15	3.3	17	—	B9A	4	U.S.A.
8BN8	8.4	0.45	250	1.6	3.0	28.0	2.5	70	—	B9A	5	U.S.A.
8CN7	4.2	0.225		1.0	3.0	58.0	1.2	70	—	B9A	6	U.S.A.
	8.4	0.45	250									
8CS7	8.4	0.45	250	19.0	10.5	3.75	4.5	15.5	—	B9A	7	U.S.A.
			250	10.0	8.5	7.7	2.2	17.0	—			
8CX8	8.0	0.6	150	9.2	—	8.7	4.4	40	120	B9A	4	U.S.A.
8CY7	7.9	0.6	250	1.2	3.0	52.0	1.3	68	—	B9A	7	U.S.A.
8EB8	8.0	0.6	250	2.0	2.0	36.0	2.7	100	—	B9A	8	U.S.A.
9AU7	4.7	0.45	250	10.5	8.5	7.7	2.2	17	—	B9A	9	U.S.A.
	9.4	0.225										
9BK7A	9.45	0.3	150	18.0	—	4.6	9.3	43	56	B9A	2	Fivre
9BR7	4.7	0.6	100	3.7	—	15.0	4.0	60	270	B9A	10	U.S.A.
	9.4	0.3										
9BR8	9.45	0.3	150	18.0	—	5.0	8.0	40	56	B9A	11	U.S.A.
9CL8	9.45	0.3	125	15.0	—	5.0	8.0	40	—	B9A	12	U.S.A.
9DZ8	9.0	0.6	120	0.8	—	70.0	1.4	100	1500	B9A	13	U.S.A.
9T8	9.45	0.3	100	0.8	1.0	54.0	1.3	70	—	B9A	14	Fivre
9U8A	9.45	0.3	150	18.0	—	5.0	8.5	42.5	56	B9A	15	U.S.A.
9X8	9.5	0.3	150	18.0	—	5.0	8.5	42.5	56	B9A	1	U.S.A.
10C8	10.5	0.3	250	7.3	—	12.0	4.4	52	390	B9A	16	U.S.A.
10DA7	10.5	0.6	250	9.0	8.0	7.7	2.6	20	—	B9A	7	U.S.A.
10DE7	10.0	0.6	250	5.5	11.0	8.75	2.0	17.5	—	B9A	17	U.S.A.
			150	35.0	17.5	0.925	6.5	6.0	—			
10EB8	10.5	0.45	250	2.0	2.0	36.0	2.7	100	—	B9A	8	U.S.A.
10L14	26.0	0.1	170	8.7	—	8.4	6.0	50	160	B9A	2	Ediswan
10LD12	28.0	0.1	250	1.0	3.0	58.0	1.2	70	—	B9A	18	Ediswan
10LD13	13.0	0.1	100	0.8	1.0	50.0	1.4	70	—	B9A	19	Ediswan
10PL12	50.0	0.1	100	3.5	0	28.0	2.5	70	—	B9A	13	Ediswan
11CY7	11.0	0.45	25.0	1.2	3.0	52.0	1.3	68	—	B9A	7	U.S.A.
12AE7	6.3	0.9	12.6	1.9	—	3.25	4.0	13	1.5M	B9A	9	U.S.A.
	12.6	0.45	12.6	7.5	—	0.99	6.5	6.4	1.0M			
12AL8	12.6	0.45	12.6	0.25	0.9	27.0	0.55	15.0	—	B9A	20	U.S.A.
12AU8	12.6	0.3	150	8.5	—	8.2	4.9	40	150	B9A	4	Fivre
12BR7A	6.3	0.45	100	3.7	—	15.0	4.0	60	270	B9A	10	U.S.A.
	12.6	0.225										
12CT8	12.6	0.3	150	9.0	—	8.2	4.9	40	150	B9A	16	U.S.A.
12DF7	6.3	0.3	250	1.2	2.0	55	1.6	100	—	B9A	9	U.S.A.
12DT7	6.3	0.3	250	1.2	2.0	62.5	1.6	100	—	B9A	9	U.S.A.
	12.6	0.15										
12DT8	12.6	0.15	250	10.0	—	10.5	5.5	60	200	B9A	2	U.S.A.
12DV7	12.6	0.15	12.6	0.4	—	18.6	0.75	14.0	2.2M	B9A	21	U.S.A.
12DW7	6.3	0.3	250	1.2	2.0	62.5	1.6	100	—	B9A	9	U.S.A.
	12.6	0.15	250	10.5	8.5	7.7	2.2	17	—			
12DW8	12.6	0.45	12.6	1.9	—	3.0	2.7	9.5	1.5M	B9A	22	U.S.A.
			12.6	7.5	—	0.99	6.5	6.4	1.0M			
12DY8	12.6	0.35	12.6	1.2	0	10.0	2.0	20	—	B9A	23	U.S.A.
12DZ8	12.6	0.45	120	0.8	—	70.0	1.4	100	1500	B9A	13	U.S.A.
12EC8	12.6	0.225	12.6	2.4	—	5.3	4.7	25	4.7K	B9A	11	U.S.A.
13DE7	13.3	0.45	250	5.5	11.0	8.75	2.0	17.5	—	B9A	17	U.S.A.
			150	35.0	17.5	0.925	6.5	6.0	—			
13DR7	13.0	0.45	250	1.4	3.0	40.0	1.6	68	—	B9A	7	U.S.A.
14G6	14.0	0.1	170	1.5	1.55	42.0	1.65	70	—	B9A	19	U.S.A.
15DQ8	15.0	0.3	200	3.0	1.7	16.25	4.0	65	—	B9A	24	U.S.A.
18DZ8	18.0	0.3	120	0.8	—	70.0	1.4	100	1500	B9A	13	U.S.A.
19DE7	19.4	0.3	250	5.5	11.0	8.75	2.0	17.5	—	B9A	17	U.S.A.
			150	35.0	17.5	0.925	6.5	6.0	—			
30C13	9.0	0.3	100	14.2	2.0	4.0	5.0	20	—	B9A	25	Ediswan
30L15	7.0	0.3	90	—	1.2	3.1	9.0	28	—	B9A	26	Ediswan
30PL13	16.0	0.3	250	2.0	—	5.3	3.4	18	—	B9A	33	Ediswan
35DZ8	35.0	0.15	120	0.8	—	70.0	1.4	100	1500	B9A	13	U.S.A.
50BM8	50.0	0.1	100	3.5	0	28.0	2.5	70	—	B9A	13	U.S.A.
396A	6.3	0.3	150	8.2	—	6.2	5.5	35	240	B9A	27	Ericsson
407A	20.1	0.1	150	8.2	—	6.2	5.5	35	240	B9A	28	Ericsson
	40.0	0.05										

TRIODE AMPLIFIERS—Contd.

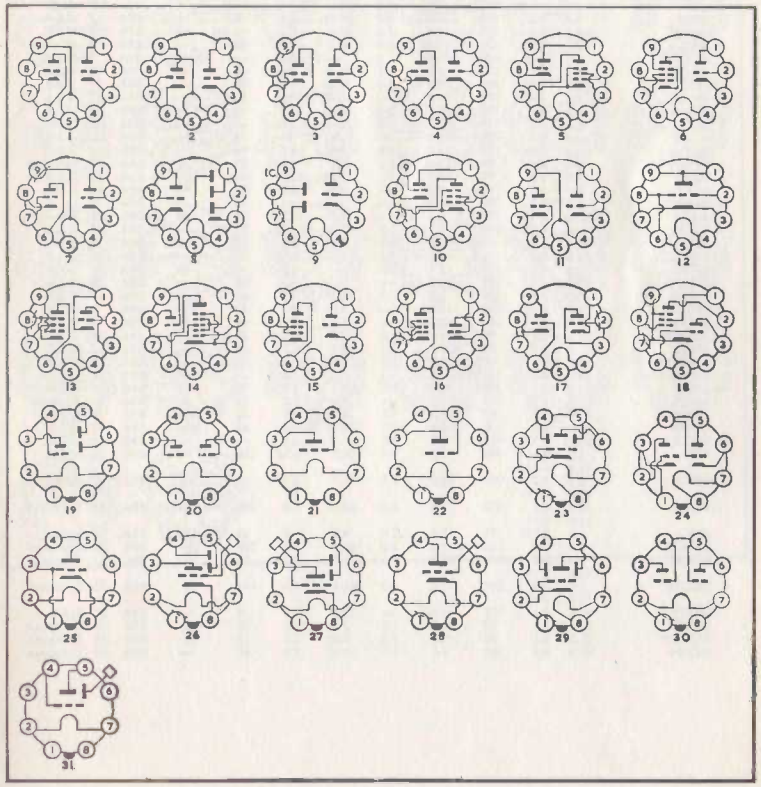
Type	FILAMENT or HEATER Volts	Amps	ANODE Volts	I/mA	Neg. Grid Volts	rₐ Ω	gm mA/V	Amp Factor	RK Ω	BASE Type	Ref.	Maker
6189	6.3	0.3	250	10.5	8.5	7.7	2.2	17	—	B9A	9	U.S.A.
	12.6	0.15										
6385	6.3	0.35	150	8.2	—	6.25	5.5	35	240	B9A	27	U.S.A.
6386	6.3	0.35	100	9.6	—	4.25	4	17	200	B9A	27	U.S.A.
6414	6.3	0.45	180	8.0	2.0	7.65	5.55	42.5	—	B9A	9	U.S.A.
	12.6	0.225										
6678	6.3	0.45	150	18.0	—	5.0	8.5	42.5	56	B9A	29	U.S.A.
6840	6.3	0.8	250	14.0	—	3.0	6.7	20	620	B9A	30	U.S.A.
	12.6	0.4										
6851	12.6	0.125	250	1.0	—	60.0	1.2	70	3100	B9A	9	U.S.A.
	6.3	0.25										
6854	6.3	0.5	150	8.2	—	6.5	5.225	35	240	B9A	27	U.S.A.
6877	6.3	0.8	150	75.0	12.0	2.0	6.5	13	—	B9A	31	U.S.A.
6900	6.3	0.9	120	36.0	2.0	2.0	11.5	23	—	B9A	32	U.S.A.
	12.6	0.45										
6913	6.3	0.6	150	11.0	5.0	3.7	4.6	18	—	B9A	9	U.S.A.
	12.6	0.3										
6922	6.3	0.3	200	15.0	9.0	2.9	11.5	33	—	B9A	2	U.S.A.



TRIODE AMPLIFIERS—Contd.

Type	FILAMENT or HEATER Volts	Amps	ANODE Volts	I/mA	Neg. Grid Volts	ra Ω	gm mA/V	Amp Factor	RK Ω	BASE Type	Ref.	Maker
6955	12.6	0.175	250	11.5	—	7.0	2.35	16.5	—	B9A	1	U.S.A.
7025	6.3	0.3	250	1.2	2.0	62.5	1.6	100	—	B9A	1	U.S.A.
	12.6	0.15										
7044	6.3	0.9	120	36.0	2.0	1.9	10	19	—	B9A	2	U.S.A.
	12.6	0.45										
7057	13.5	0.18	150	10.0	—	5.3	6.8	36	220	B9A	3	U.S.A.
7058	13.5	0.155	250	1.25	2.0	61.0	1.65	100	—	B9A	4	U.S.A.
7059	13.5	0.195	150	18.0	—	4.7	8.5	40	56	B9A	5	U.S.A.
7060	13.5	0.28	150	9.0	—	8.2	4.9	40	150	B9A	6	U.S.A.
7062	6.3	0.4	100	8.5	0.8	6.4	7.8	50	—	B9A	7	U.S.A.
	12.6	0.2										
7118	6.3	0.4	100	8.5	1.3	5.9	5.6	32	—	B9A	7	U.S.A.
	12.6	0.2										
7119	6.3	0.64	180	2.3	7.0	2.75	6.4	17.5	—	B9A	2	U.S.A.
	12.6	0.32										
7199	6.3	0.45	215	9.0	8.5	8.0	2.1	17	—	B9A	1	U.S.A.
7258	12.5	0.21	150	15.0	3.0	4.7	4.5	21	—	B9A	6	U.S.A.
7318	6.3	0.35	300	900 Pulse Amplifier							1	U.S.A.
	12.6	0.175										
B109	26.0	0.1	170	8.7	—	8.4	6.0	50	160	B9A	3	G.E.C.
B729	6.3	0.3	200	10.0	—			18		B9A	3	G.E.C.
CC81E	6.3	0.3	250	10.0	—	10.9	5.5	60	60	B9A	1	European
	12.6	0.15										
CC82E	6.3	0.3	250	10.5	8.5	7.7	2.2	17	—	B9A	1	European
	12.6	0.15										
CC86E	6.3	0.6	250	14.5	—	3.85	5.2	20	620	B9A	1	European
DH109	28.0	0.1	250	1.0	3.0	53.0	1.2	70	—	B9A	8	G.E.C.
DH119	14.0	0.1	170	1.5	1.5	42.0	1.65	70	—	B9A	9	G.E.C.
E80CF	6.3	0.38	100	14.0	—	—	5.0	—	145	B9A	10	European
E81CC	6.3	0.3	250	10.0	—	10.9	5.5	60	60	B9A	11	European
	12.6	0.15										
E180CC	6.3	0.4	100	8.5	0.8	6.4	7.8	50	—	B9A	7	European
	12.6	0.2										
E181CC	6.3	0.4	100	8.5	1.3	5.9	5.6	32	—	B9A	7	European
	12.6	0.2										
E182CC	6.3	0.64	150	2.3	7.0	2.75	6.4	17.5	—	B9A	2	European
	12.6	0.32										
EC86	6.3	0.2	175	12.0	1.5	4.86	140	68	—	B9A	12	European
ECC86	6.3	0.33	6.3	1.0	0.45	4.5	2.6	13	100K	B9A	3	European
ECC88	6.3	0.33	90	15.0	1.3	2.64	12.5	33	—	B9A	3	European
ECC189	6.3	0.365	90	15.0	1.2	2.64	12.5	33	—	B9A	4	French
ECC8015	6.3	0.3	250	10.0	—	10.9	5.5	60	60	B9A	1	European
	12.6	0.15										
ECC8025	6.3	0.3	250	10.5	8.5	7.7	2.2	17	—	B9A	1	European
	12.6	0.15										
ECC865	6.3	4.0	170	8.7	—	8.4	6.0	50	160	B9A	3	European
ECF82	6.3	0.45	150	18.0	1.0	5.0	8.5	42.5	56	B9A	5	European
ECF83	6.3	0.4	60	6.5	3.7	3.0	3.6	11	—	B9A	13	European
ECH83	6.3	0.3	12.6	0.75	—	—	1.4	—	47K	B9A	14	European
ECL83	6.3	0.6	200	2.4	1.5	34	2.5	85	—	B9A	15	European
ECL84	6.3	0.71	200	3.0	1.7	16.25	4.0	65	—	B9A	15	European
LN319	13.0	0.3	250	2.0	—	5.3	3.4	18	—	B9A	15	G.E.C.
LZ329	9.0	0.3	120	6.0	2.0	4	5.0	20	—	B9A	5	G.E.C.
M8162	6.3	0.3	250	10.0	2.0	11	5.5	60	—	B9A	1	Mullard
	12.6	0.15										
PC86	3.8	0.3	175	12.0	1.5	4.86	14.0	68	—	B9A	12	European
PCC88	7.0	0.3	90	15.0	1.2	2.7	12.5	33	—	B9A	3	European
PCC89	7.2	0.3	90	15.0	1.2	3.0	12.0	36	—	B9A	17	European
PCC189	7.0	0.3	90	15.0	1.2	2.64	12.5	33	—	B9A	4	French
PCF84	9.0	0.3	100	14.0	2.0	—	2.5	—	—	B9A	18	European
PCL84	15.0	0.3	200	3.0	1.7	16.25	4.0	65	—	B9A	16	European
UCC84	21.0	0.1	90	12.0	1.5	4	6.0	24	—	B9A	17	European
UCF80	27.0	0.1	100	14.0	2.0	4	5.0	20	—	B9A	10	European
2Г2М	2.0	0.06	120	0.5	0	130	0.35	45	—	I.O.	19	Soviet
2НМ	2.0	0.24	120	1.2	2.0	32	1.0	32	—	I.O.	20	Soviet
2С3М	2.0	0.12	120	1.5	2.5	17	1.3	22	—	I.O.	21	Soviet
2Ф1М	2.0	0.125	120	3.3	1.0	15	1.6	24	—	I.O.	22	Soviet
2Ф2М	2.0	0.06	120	2.0	1.0	28	0.9	25	—	I.O.	22	Soviet
6CC10	6.3	0.6	250	6.5	9.0	9.1	2.2	20	1350	I.O.	24	Czech
6CK4	6.3	1.25	250	55.0	26.0	1.05	6.5	6.7	—	I.O.	25	U.S.A.
6DN7	6.3	0.9	250	6.6	8.0	9.0	2.5	22.5	—	I.O.	24	U.S.A.
			250	33.0	9.5	2.2	7.4	16.0	—			
6Г1	6.3	0.3	250	9.5	9.0	8.5	1.9	16	—	I.O.	23	Soviet
6Г2	6.3	0.3	250	1.0	2.0	91	1.1	100	—	I.O.	23	Soviet
6Г7	6.3	0.3	250	1.1	3.0	60	1.2	72	—	I.O.	26	Soviet
6Г7С	6.3	0.3	250	1.1	3.0	58	1.2	70	—	I.O.	27	Soviet

Type	FILAMENT or HEATER Volts	Amps	ANODE Volts	I/mA	Neg. Grid Volts	ra Ω	gm mA/V	Amp Factor	RK Ω	BASE Type	Ref.	Maker
6H8C	6.3	0.6	250	9.0	8.0	7	3.0	21	—	I.O.	24	Soviet
6H9C	6.3	0.3	250	2.3	2.0	44	1.6	70	—	I.O.	24	Soviet
6C2C	6.3	0.3	250	9.0	8.0	7.7	2.6	20	—	I.O.	22	Soviet
6Ф5С	6.3	0.3	250	0.9	2.0	66	1.5	100	—	I.O.	28	Soviet
85N7GTB	8.4	0.45	250	9.0	8.0	7.7	2.6	20	—	I.O.	24	U.S.A.
12Г1	12.6	0.15	250	9.5	9.0	8.5	1.9	16	—	I.O.	29	Soviet
12Г2	12.6	0.15	250	1.15	2.0	91	1.1	100	—	I.O.	29	Soviet
13D2	6.3	0.6	250	9.0	8.0	7.7	2.6	20.0	—	I.O.	24	Brimar
31BX7	31.5	0.3	250	42.0	—	1.3	7.6	10.0	390	I.O.	24	U.S.A.
6082A	26.5	0.6	135	125.0	—	0.28	7.0	2.0	250	I.O.	24	U.S.A.
6394	26.5	1.2	190	185.0	—	0.2	13.5	2.7	200	I.O.	24	U.S.A.
6520	6.3	2.5	135	112.0	—	0.28	7.0	2.0	250	I.O.	24	U.S.A.
7236	6.3	2.4	120	120.0	14.0	0.4	12.5	4.8	—	I.O.	1	U.S.A.
ECC230	6.3	2.5	135	125.0	—	0.28	7.0	2	250	I.O.	24	European
R125C	18.0	0.4	250	5.0	5.5	13	2.5	33	—	I.O.	26	French
СБ240	2.0	0.125	120	3.0	2.5	10	2	20	—	I.O.	22	Soviet
СБ243	2.0	0.24	120	2.2	0	16	1.8	29	—	I.O.	30	Soviet
СБ245	2.0	0.32	120	10.0	7.5	2	2.2	4.4	—	I.O.	31	Soviet
УБ240	2.0	0.125	120	3.5	1.0	15.6	1.6	25	—	I.O.	22	Soviet

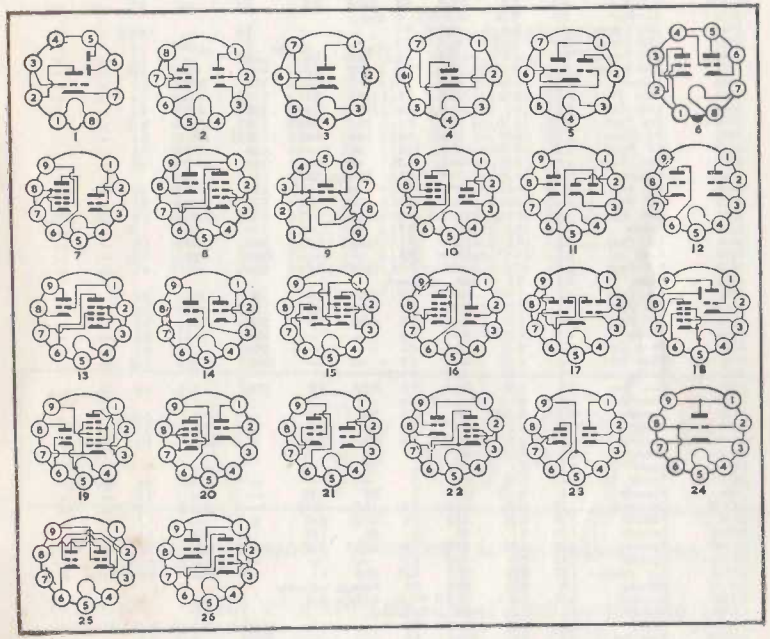


TRIODE AMPLIFIERS—Contd.

Type	FILAMENT or HEATER Volts	Amps	ANODE Volts	I/mA	Neg. Grid Volts	ra Ω	gm mA/V	Amp Factor	RK Ω	BASE Type	Ref.	Maker
DH118	14.0	0.1	170	1.5	1.6	42.0	1.65	70	1000	B8A	1	G.E.C.
DH718	6.3	0.225	250	1.0	3.0	54.0	1.3	70	—	B8A	1	G.E.C.
PTT120P	18.0	0.2	220	10.0	—	11.0	5.5	60	150	F8A	2	French
PTT141	6.3	0.3	150	23.0	1.3	2.0	25.0	50	60	F8A	2	French
R148	18.0	0.2	220	10.0	1.5	11.0	5.5	60	—	F8A	2	French
3AB4	3.15	0.3	250	10.0	2.0	10.0	5.5	55	—	B7G	3	U.S.A.
3ER5	3.6	0.3	200	10.0	1.2	7.8	10.5	80	—	B7G	4	U.S.A.
6ER5	6.3	0.18	200	10.0	1.2	7.8	10.5	80	—	B7G	4	U.S.A.
10ER5	10.8	0.1	200	10.0	1.2	7.8	10.5	80	—	B7G	4	U.S.A.
6535	6.3	0.45	100	8.5	0.85	7.1	5.3	38	—	B7G	5	U.S.A.
EC95	6.3	0.18	200	10.0	1.2	7.8	10.5	80	—	B7G	4	European
PC92	3.15	0.3	250	10.0	2.0	12.0	5.0	60	—	B7G	3	European
PC95	3.6	0.3	200	10.0	1.2	7.8	10.5	80	—	B7G	4	European
UC95	10.8	0.1	200	10.0	1.2	7.8	10.5	80	—	B7G	4	European
6EA7 (U.S.A.)	6.3	1.05	250	1.5	3.0	34.00	1.9	65	—	I.O.	6	U.S.A.
			175	48.0	25.0	.77	6.5	5	—			
10EG7	9.7	0.6	250	5.5	11.0	8.75	2.0	17.5	—	I.O.	6	U.S.A.
			150	45.0	17.5	0.8	7.5	6.0	—			
5FV8	4.7	0.6	125	14.0	1.0	5.00	8.0	40	—	B9A	7	U.S.A.
5GH8	4.7	0.6	125	13.5	1.0	5.4	8.5	46	—	B9A	8	U.S.A.
6C16	6.3	0.45	100	14.00	2.0	4.0	5.0	20	—	B9A	8	Edlswan
6CR4	6.3	0.37	130	16.0	1.0	—	60.0	—	—	B9A	9	U.S.A.
6DQ8	6.3	0.71	200	3.0	1.7	16.25	4.0	65	—	B9A	10	U.S.A.
6FM8	6.3	0.45	280	1.0	3.0	58.00	1.2	70	—	B9A	11	U.S.A.
6FV8	6.3	0.45	125	14.0	1.0	5.00	8.0	40	—	B9A	7	U.S.A.
6FW8	6.3	0.4	125	15.0	2.0	2.62	12.5	33	—	B9A	12	U.S.A.
6FY8	6.3	1.2	125	2.5	1.5	—	2.0	—	—	B9A	13	U.S.A.
6GA8	6.3	0.3	250	8.0	—	—	—	18	—	B9A	12	U.S.A.
6GH8	6.3	0.45	125	13.5	1.0	5.4	8.5	46	—	B9A	8	U.S.A.
6L16	6.3	0.4	90	12.0	1.5	3.7	6.2	23	—	B9A	14	Edlswan
7ES8	7.0	0.3	90	15.0	1.2	2.64	12.5	33	—	B9A	12	U.S.A.
9EN7	9.0	0.3	120	6.0	—	4.0	5.0	20	—	B9A	15	U.S.A.
9GB8	9.4	0.3	250	8.0	—	—	—	18	—	B9A	16	U.S.A.
10L14	26.0	0.1	170	8.7	—	8.4	6.0	50	160	B9A	12	Edlswan
12FQ8	12.6	0.15	250	1.5	1.5	76.0	1.25	95	—	B9A	17	U.S.A.
12FR8	12.6	0.32	12.6	1.0	0.6	8.3	1.2	10	—	B9A	18	U.S.A.
12FX8	12.6	0.3	12.6	1.3	0.8	7.1	1.4	10	—	B9A	19	U.S.A.
12FY8	12.6	0.6	125	2.5	1.5	—	2.0	—	—	B9A	13	U.S.A.
13GC8	13.0	0.3	250	8.0	—	—	—	18	—	B9A	20	U.S.A.
15DX8	15.0	0.3	200	3.0	1.7	16.25	4.0	65	—	B9A	10	U.S.A.
19CL8A	18.9	0.15	125	15.00	—	5.0	8.0	40	56	B9A	8	U.S.A.
19EA8A	18.9	0.15	150	18.00	—	5.0	8.5	42.5	56	B9A	8	U.S.A.
21CW7	21.0	0.1	90	12.0	1.5	4.0	6.0	24	—	B9A	14	U.S.A.
21DJ8	21.0	0.1	90	15.0	1.2	2.7	12.5	33	—	B9A	12	U.S.A.
21E58	21.0	0.1	90	15.0	1.2	2.64	12.5	33	—	B9A	12	U.S.A.
25FY8	25.0	0.3	125	2.5	1.5	—	2.0	—	—	B9A	13	U.S.A.
27BL8	27.0	0.1	100	14.00	2.0	4.0	5.0	20	—	B9A	22	U.S.A.
30C15	9.0	0.3	120	6.0	—	4.0	5.0	20	—	B9A	15	Edlswan
45DQ8	45.0	0.1	200	3.0	1.7	16.25	4.0	65	—	B9A	10	U.S.A.
45DX8	45.0	0.1	200	3.0	1.7	16.25	4.0	65	—	B9A	10	U.S.A.
50FY8	50.00	0.15	125	2.5	1.5	—	2.0	—	—	B9A	13	U.S.A.
7247	6.3	0.3	250	1.2	2.0	80.0	1.25	100	—	B9A	23	U.S.A.
	12.6	0.15										
E82CC	6.3	0.3	250	10.5	8.5	7.7	2.2	17	—	B9A	23	European
	12.6	0.15										
E83CC	6.3	0.3	250	1.2	2.0	62.5	1.6	100	—	B9A	23	European
	12.6	0.15										
E86C	6.3	0.165	175	12.0	2.0	4.9	14.0	68	125	B9A	24	European
E283CC	6.3	0.3	250	1.2	2.0	62.5	1.6	100	—	B9A	25	European
ECC802	6.3	0.3	250	10.5	8.5	7.7	2.2	17	—	B9A	23	European
	12.6	0.15										
ECC803	6.3	0.3	250	1.2	2.0	62.5	1.6	100	—	B9A	23	European
	12.6	0.15										
LN119	48.0	0.1	100	3.0	—	33.0	2.2	70	—	B9A	26	G.E.C.
UCC88	21.0	0.1	90	15.0	1.2	2.7	12.5	33	—	B9A	12	European
UCC189	21.0	0.1	90	15.0	1.2	2.64	12.5	33	—	B9A	12	European
UCL84	45.0	0.1	200	3.0	1.7	16.25	4.0	65	—	B9A	10	European

TRIODE AMPLIFIERS—Contd.

Type	FILAMENT or HEATER Volts	Amps	ANODE Volts	I/mA	Neg. Grid Volts	ra Ω	gm mA/V	Amp Factor	RK Ω	BASE Type	Ref.	Maker
416B	6.3	1.2	200	30.0	—	—	50.0	—	260	No base	—	Ericsson
DX144	6.3	0.65	300	25.0	—	2.3	19.0	43	—	No base	—	U.S.A.
DX145	6.3	0.65	300	70.0	—	2.3	19.0	43	—	No base	—	U.S.A.
EC760	6.3	0.15	150	13.0	2.4	40	6.5	26	—	No base	—	E. Europn.
M8144	6.3	0.3	250	10.0	2.0	11.0	5.5	60	—	No base	—	Mullard
	12.6	0.15										
M8149	6.3	0.3	250	10.5	8.5	7.7	2.2	17	—	No base	—	Mullard
	12.6	0.15										
M8179	6.3	0.45	100	8.5	0.85	7.1	5.3	38	—	No base	—	Mullard
M8214	6.3	0.3	250	1.2	2.0	62.5	1.6	100	—	No base	—	Mullard
	12.6	0.15										
R243	6.3	0.4	250	20.0	3.5	3.0	6.0	30	—	No base	—	French



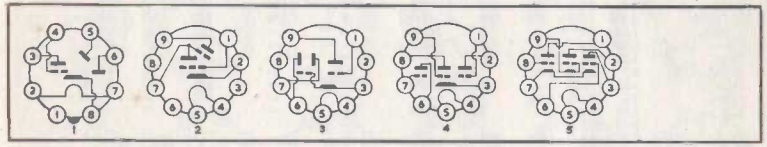
SUB-MINIATURE VALVES

Type		FILAMENT or HEATER Volts	Amps	ANODE Volts	I/mA	SCREEN Volts	I/mA	Neg Grid Volts	ra. (KΩ)	gm. (mA/V)	Anode Load Ω	Output (mW)
1C91	Triode	1.25	0.13	130	7.0	—	—	2.5	—	—	—	—
1EDR1	Dio Pent.	1.25	0.015	45.0	0.8	45.0	0.25	—	—	0.35	—	—
1ER11	R.F. Pent.	1.25	0.025	67.5	1.6	67.5	0.4	—	—	1.1	—	—
1L91	L.F. Pent.	1.25	0.025	45.0	1.25	45.0	0.4	4.5	225	0.5	30K	0.02
1N3	Tuning Ind.	1.4	0.025	90.0	0.25	Target	—	13.5	—	—	—	—
1T12B	Out. Pent.	1.25	0.05	45.0	1.1	45.0	0.37	2.0	—	0.5	50K	0.01
2L2	Rectifier	2.0	0.2	22000 P.I.V.		0.5mA						
25/141G	Diode	6.3	0.15	150V. D.C.		9 mA						
5A/172G	Pentode	6.3	0.15	100	7	100	2.2	1.4	250	5.0	—	—
5A/173G	Pentode	6.3	0.2	100	7.5	100	2.5	2.0	250	5.0	—	—
5A/174G	Pentode	6.3	0.2	100	7	100	2.2	1.4	180	3.0	—	—
5A/175G	Pentode	6.3	0.15	100	7.2	100	2.2	1.2	260	4.5	—	—
6C6b	Triode	6.3	0.2	120.0	9.0	—	—	2.0	5.0	5.0	—	—
6C7B	Triode	6.3	0.2	250.0	4.5	—	—	2.0	16.25	4.0	—	—
6F24	Pentode	6.3	0.45	250.0	15.0	200	1.9	2.1	300	10.5	—	—
6K1B	R.F. Pent.	6.3	0.2	120.0	7.5	120.0	3.5	2.0	—	4.8	—	—
6K2b	R.F. Pent.	6.3	0.2	120.0	5.5	120.0	6.0	2.0	—	3.2	—	—
6U6 \	Rectifier	6.3	0.15	16-v D.C. at 8mA.								
5764	UHF Triode	6.3	0.4	10.0	0.1	—	—	5.0	—	0.023	—	—
5765	UHF Triode	6.3	0.4	45.0	0.7	—	—	0	38.0	1.3	—	—
5766	UHF Triode	6.3	0.4	135.0	6.0	45.0	0.6	3.0	—	1.7	—	—
5767	UHF Triode	6.3	0.4	45.0	3.0	45.0	0.9	0	—	1.85	—	—
5884	Tetrode	1.25	0.01	67.5	2.5	67.5	0.8	0	1000.0	1.3	—	—
5968	Twin Tri.	1.25	0.12	125.0	5.5	125.0	0.9	7.5	175.0	1.6	—	—
5969	Twin Tet.	1.25	0.2	110.0	30.0	110.0	2.0	270Ω	10.0	4.2	—	—
5970	Dio Pent.	1.25	0.16	15.0	0.1	15.0	0.025	0.8	720.0	0.19	—	—
5972	R.F. Pent.	1.25	0.05	15.0	0.05	15.0	0.02	0.62	2000.0	0.1	—	—
6147	R.F. Pent.	1.25	0.125	180.0	11.5	—	—	—	5.5	4.5	—	—
6224	Out. Pent.	6.3	0.45	180.0	11.5	—	—	—	5.5	4.5	—	—
6269	Rectifier	26.5	0.35	16 K. P.I.V.		65 mA	D.C.					
6418	R.F. Pent.	1.25	0.01	150.0	11.0	—	—	11	5.5	4.5	—	—
6419	R.F. Pent.	0.625	0.01	150.0	11.0	—	—	11	5.5	4.5	—	—
6526	Out. Pent.	1.25	0.125	110.0	6.5	110.0	1.15	6.0	140.0	1.9	10K	375.0
6533	Triode	6.3	0.2	120.0	0.9	—	—	—	54	1.75	—	—
6540	R.F. Pent.	6.3	0.2	120.0	7.5	120.0	2.6	200Ω	340.0	5.0	—	—
6832	Twin Tri.	6.3	0.4	100.0	0.8	—	—	3000Ω	25.0	1.05	—	—
6872	R.F. Pent.	6.3	0.2	120.0	7.75	120.0	2.7	200Ω	—	4.1	—	—
6923	Diode	6.3	0.3	100v. at 0.3mA.								
6943	R.F. Pent.	6.3	0.175	100.0	8.0	100.0	2.3	150Ω	300.0	3.6	—	—
6944	R.F. Pent.	6.3	0.175	100.0	7.0	100.0	2.1	150Ω	280.0	3.2	—	—
6945	R.F. Pent.	6.3	0.35	100.0	25.0	100.0	1.5	270Ω	20.0	3.5	—	—
6946	Triode	6.3	0.175	100.0	9.0	—	—	270Ω	4.3	3.8	—	—
6947	Twin Tri.	6.3	0.35	150.0	6.5	—	—	270Ω	8.75	4.0	—	—
6948	Twin Tri.	6.3	0.35	100.0	0.8	—	—	1500Ω	42.5	1.65	—	—
6977	Tuning Ind.	1.0	0.03	50.0	0.585							
7001	Out. Tet.	6.3	0.45	120.0	35.0	120.0	4.0	250Ω	15.0	4.8	—	—
7327	Twin Tri.	6.3	0.3	Pulse Triode								
7432	Pentode	6.3	0.175	100	7.0	100	2.2	—	—	5.0	—	—
7433	Pentode	6.3	0.2	100	7.5	100	2.5	—	—	5.5	—	—
7434	Pentode	6.3	0.2	100	7.0	100	2.4	—	—	3.1	—	—
7435	Diode	6.3	0.15	460 P.I.V.		10 mA						
7436	Diode	6.3	0.4	930 P.I.V.		50 mA						
7437	Triode	6.3	0.15	100	8	—	—	—	4.8	4.2	20	—
7438	Pentode	6.3	0.175	100	3	100	2.25	—	—	2.5	—	—
DCF60	Converter	1.25	0.04	45.0	0.4	45.0	0.15	—	1000.0	0.2	—	—
DF60	Pentode	1.25	0.05	67.5	1.8	67.5	0.48	0	—	1.1	—	—
DF66B	Pentode	1.25	0.1	90	5.7	90	1.75	1.6	350	2.3	—	—
DF669	Pentode	1.25	0.05	67.5	1.8	67.5	0.48	0	1000	1.1	—	—
DF703	Pentode	1.25	0.01	10.5	0.2	—	—	3.0	—	0.16	—	—
DL620	Out. Pent.	1.25	0.05	67.5	3.25	67.5	1.1	6.5	—	0.65	20K	65.0
DM160	Indicator	1.0	0.03	50.0	0.5	Voltage Indicator						
DY667	Rectifier	0.65	0.013	1.5 K P.I.V.		0.15mA D.C.						
EA766	Diode	6.3	0.15	150v. at 9mA D.C.								
EC71	Triode	6.3	0.15	100.0	12.0	—	—	150Ω	3.65	5.5	—	—
ECC70	Twin Tri.	6.3	0.3	100.0	6.5	—	—	150Ω	6.45	5.4	—	—
EF730	Pentode	6.3	0.15	100.0	3.0	100.0	5.0	150Ω	160.0	1.0	—	—
EF731	Pentode	6.3	0.15	100.0	7.2	100.0	2.2	120Ω	260.0	4.5	—	—
EF732	Pentode	6.3	0.15	100.0	7.5	100.0	2.4	150Ω	230.0	5.0	—	—
EF734	Pentode	6.3	0.15	100.0	7.5	100.0	2.4	150Ω	260.0	5.0	—	—
EF762	Pentode	6.3	0.15	100.0	7.5	100.0	2.5	1.5	250	5.0	—	—
EL71	Out. Pent.	6.3	0.45	110.0	30.0	110.0	2.2	270Ω	15.0	4.2	3K	1000.0

Type		FILAMENT or HEATER Volts	Amps	ANODE Volts	I/mA	SCREEN Volts	I/mA	Neg Grid Volts	ra. (kΩ)	gm. (mA/V)	Anode Load Ω	Output (mW)
02DF	Pentode	0.625	0.01	15.0	0.075	15.0	0.025	0.62	1000	0.115	—	—
R242P	Triode	6.3	0.15	150.0	15.0	—	—	4.5	4.0	4.25	—	—
R263	Diode	6.3	0.15	460 P.I.V. 10mA D.C.								
R271	Pentode	6.3	0.2	120.0	5.2	120.0	3.5	2.0	150.0	3.2	—	—
XR6	R.F. Pent.	6.3	0.15	100.0	7.0	100.0	2.2	1.4	300.0	5.0	—	—
XR7	R.F. Pent.	6.3	0.2	100.0	7.5	100.0	2.5	2.0	250.0	5.5	—	—
XR8	Triode	6.3	0.15	100.0	8.0	—	—	2.5	4.75	4.2	—	—
XR9	Twin Tri.	6.3	0.3	100	8.5	—	—	—	4.0	5.0	20	—
Y06T12B	R.F. Pent.	0.625	0.03	30	0.15	30	0.04	—	—	—	—	—
Y25	Tuning Ind.	1.4	0.025	90	0.25	Target		13.5	—	—	—	—

TUNING INDICATORS

Type	HEATER Volts	Amps.	TARGET Volts	I/mA	Grid Volts	BASE Type	Ref.	Maker
1M90	1.4	0.025	85	0.25	13.5	B9A	2	Czech
6DA5	6.3	0.3	250	2.0	10.5	B9A	1	U.S.A.
6DL7	6.3	0.3	250	3.0	—	B9A	1	U.S.A.
6DU6	6.3	0.3	250	2.1	18	B9A	3	U.S.A.
6FG6	6.3	0.27	250	0.6	22	B9A	3	U.S.A.
6M40	6.3	0.3	250	0.5	20.0	B9A	2	U.S.A.
12FG6	12.6	0.1	170	0.3	15	B9A	3	U.S.A.
19DA5	19.0	0.1	200	7.0	14	B9A	2	U.S.A.
5624	6.3	0.75	250	1.3	3	B9A	5	Czech
EM84	6.3	0.27	250	0.6	22	B9A	3	European
EM840	6.3	0.25	250	0.6	21	B9A	3	European
EMM801	6.3	0.3	250	0.43	20	B9A	4	European
PM84	4.2	0.3	170	0.3	15	B9A	3	European
UM81	19.0	0.1	200	7.0	14	B9A	2	European
UM84	12.6	0.1	170	0.3	15	B9A	3	U.S.A.
Y119	16.0	0.1	250	1.6	20	B9A	2	G.E.C.



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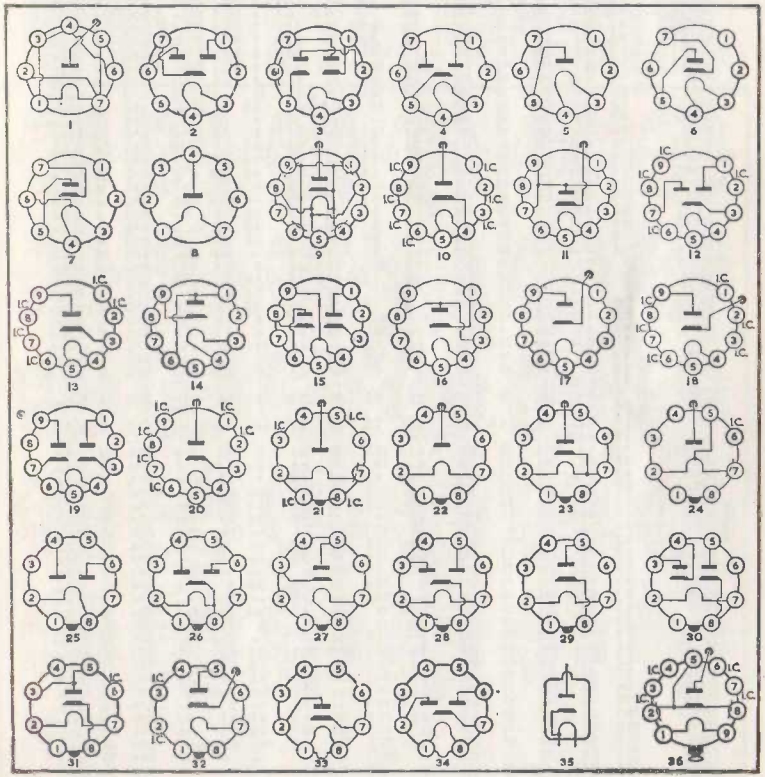
RECTIFIERS

Type	FILAMENT or HEATER Volts	Amps	MAX. VOLTS PER ANODE (RMS)	MAX. I/mA	Maximum Inverse Peak Volts	Maximum Reservoir Capacitance (50 c/s)	Minimum Series Resistance Ω	BASE Type	Ref.	MAKER
1Y32	1.4	0.26	—	2	20000	—	—	B7G	1	Czech
6Z31	6.3	0.6	325	70	1000	—	150	B7G	2	Czech
6X2II	6.3	0.3	117	9	—	—	—	B7G	3	Soviet
6II4II	6.3	0.6	—	75	1000	—	—	B7G	4	Soviet
25MK15	25.0	0.15	330	70	—	—	—	B7G	5	Japanese
35A3	35.0	0.15	—	100	700	—	—	B7G	6	U.S.A.
35C3	35.0	0.15	—	100	330	—	—	B7G	6	U.S.A.
35Y31	35.0	0.15	250	140	700	—	125	B7G	6	Czech
36AM3	18.0	0.2	—	82	365	—	—	B7G	7	U.S.A.
	36.0	0.1								
50DC4	25.0	0.3	—	120	330	—	—	B7G	7	Czech
	50.0	0.15								
DDR3	6.3	0.42	250	75	—	32	100	B7G	8	European
EZ900	6.3	0.6	325	70	—	—	—	B7G	2	European
1H2	1.4	0.55	—	0.5	24000	—	—	B9A	9	U.S.A.
1S2A	1.4	0.55	18000	0.15	22000	—	—	B9A	10	U.S.A.
2J2	2.0	0.35	—	0.2	27000	—	—	B9A	9	U.S.A.
6B3	6.3	1.2	—	150	4500	T.V. Damper Diode		B9A	11	U.S.A.
6CA4	6.3	1.0	350	150	1000	8	270	B9A	12	U.S.A.
6N3	6.3	0.9	250	180	700	60	100	B9A	13	U.S.A.
6S2A	6.3	0.09	18000	0.15	22000	—	—	B9A	10	U.S.A.
6Y50	6.3	1.65	1200	220	3500	—	—	B9A	14	Czech
12B3	12.6	0.6	—	150	4400	T.V. Damper Diode		B9A	11	U.S.A.
12DF5	6.3	0.9	—	350	1275	—	—	B9A	15	U.S.A.
	12.6	0.45								
17H3	17.5	0.3	—	75	2000	—	—	B9A	16	U.S.A.
20Y40	20.0	0.3	—	140	4500	—	—	B9A	17	Czech
26AE6	26.0	0.3	—	—	6000	Booster Diode		B9A	18	U.S.A.
38A3	38.0	0.1	—	110	700	—	—	B9A	13	U.S.A.
55N3	55.0	0.1	—	180	700	—	—	B9A	13	U.S.A.
6754	6.3	1.0	450	90	—	4	10	B9A	19	U.S.A.
EY83	6.3	1.0	—	140	5000	T.V. Damper Diode		B9A	18	European
EY88	6.3	1.2	—	—	6000	Booster Diode		B9A	18	European
M8091	6.3	1.0	625	125	2000	24	250	B9A	20	Mullard
PY83	20.0	0.3	—	175	5000	T.V. Damper diode		B9A	18	European
PY88	26.0	0.3	—	—	6000	Booster Diode		B9A	18	European
TY86F	7.4	0.07	18000	0.15	22000	—	—	B9A	10	Mullard
U49	2.0	0.35	—	0.28	25000	—	—	B9A	10	G.E.C.
U119	38.0	0.1	250	110	700	100	100	B9A	13	G.E.C.
U192	19.0	0.3	250	180	700	60	100	B9A	13	Ediswan
U381	38.0	0.1	250	110	700	100	100	B9A	13	Ediswan
UU12	6.3	1.0	350	150	1000	8	270	B9A	12	Ediswan
1G3GT	1.25	0.2	—	0.5	26000	—	—	I.O.	21	U.S.A.
1J3	1.25	0.2	—	0.5	26000	—	—	I.O.	21	U.S.A.
1K3	1.25	0.2	22000	0.05	—	—	—	I.O.	21	U.S.A.
1II1C	0.7	0.185	3300	1.0	—	—	—	I.O.	22	Soviet
1II2C	1.25	0.2	—	2.0	30000	—	—	I.O.	22	Soviet
2II2C	2.5	0.175	4500	7.5	—	—	—	I.O.	23	Soviet
3C2	1.58	0.42	—	1.1	28000	—	—	I.O.	24	U.S.A.
	3.15	0.21	—							
5AS4A	5.0	4.0	600	300	1550	—	—	I.O.	25	U.S.A.
5CG4	5.0	2.0	—	125	1400	—	—	I.O.	26	U.S.A.
5R4GYB	5.0	2.0	—	250	2650	—	—	I.O.	25	U.S.A.
5Z4C	5.0	3.0	500	250	1400	—	—	I.O.	26	E. Eurpn.
5Z10	5.0	3.0	500	250	1700	—	—	I.O.	25	Czech
5II3C	5.0	3.0	450	225	—	—	—	I.O.	25	Soviet
5II4C	5.0	2.0	350	125	—	—	—	I.O.	26	Soviet
6DA4	6.3	1.2	—	155	4400	T.V. Damper Diode		I.O.	27	U.S.A.
6DE4	6.3	1.6	—	175	5000	—	—	I.O.	27	U.S.A.
6U5M	6.3	0.6	400	60	—	—	—	I.O.	28	Soviet
17D4	16.8	0.45	—	155	4400	T.V. Damper Diode		I.O.	27	U.S.A.
17DE4	17.0	0.6	—	175	5000	—	—	I.O.	27	U.S.A.
19CS4	19.0	0.3	—	120	4500	—	—	I.O.	?	U.S.A.
22DE4	22.4	0.45	—	175	5000	T.V. Damper Diode		I.O.	27	U.S.A.
25D4	25.0	0.3	—	155	4400	—	—	I.O.	27	U.S.A.
30II1M	30.0	0.3	250	90	—	—	—	I.O.	29	Soviet
30II6G	30.0	0.3	250	90	—	—	—	I.O.	30	Soviet
GZ37	5.0	2.8	500	350	1850	4	75	I.O.	26	Mullard
U54	5.0	2.8	500	250	—	16	50	I.O.	26	Ediswan

RECTIFIERS—Contd.

Type	FILAMENT or HEATER Volts	Amps	MAX. VOLTS PER ANODE (RMS)	MAX. I/mA	Maximum Inverse Peak Volts	Maximum Reservoir Capacitance (50 c/s)	Minimum Series Resistance Ω	BASE Type	Ref.	MAKER
U291	29.0	0.3	250	275	700	100	56	I.O.	31	Ediswan
U339	19.0	0.3	—	150	4500	—	—	I.O.	32	G.E.C.
U118	40.0	0.1	250	90	—	—	—	B8A	33	G.E.C.
U718	6.3	0.6	350	90	—	—	—	B8A	34	G.E.C.
6763	Cold		—	2800	12	—	—	UX7	?	G.E.C.
A2272	6.3	1.6	—	100	16000	—	—	B9G	36	G.E.C.
U47	2.0	0.2	7800	0.5	20000	0.1	100K	B2A	35	G.E.C.
M8141	6.3	1.0	625	125	2000	24	250	None	—	Mullard

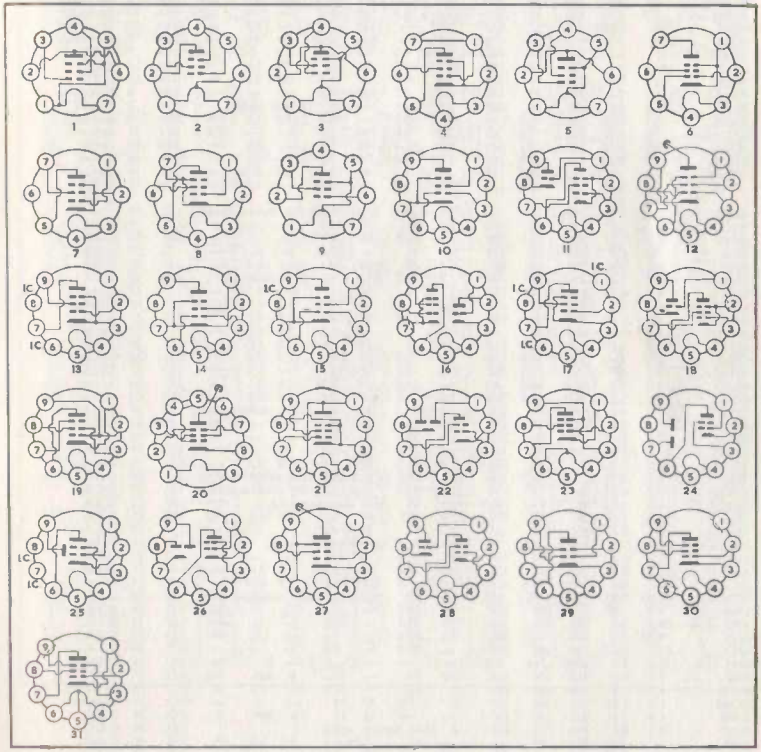


OUTPUT VALVES

Type	FILAMENT or HEATER Volts	Amps	ANODE Volts	I/mA	SCREEN Volts	I/mA	Neg. Grid Volts	ra KΩ	gm mA/V	Anode Load Ω	Output W	Dis. %	BASE Type	Ref.	MAKER
1L33	1.4	0.025	90	7.4	67.5	1.4	7	100	1.4	8.0	0.25	—	B7G	1	Czech
1L34	1.2	0.029	90	7.4	67.5	1.4	7	100	1.4	8.0	0.25	—	B7G	1	Czech
2L35	1.2	0.12	150	14.2	90	2.2	8.8	50	2.1	8.0	0.75	—	B7G	2	Czech
	2.4	0.06													
3L31	1.4	0.1	150	14.2	90	2.2	8.8	50	2.1	8.0	0.75	—	B7G	3	Czech
	2.8	0.05													
3L35	1.4	0.1	150	18.5	135	6.5	—	—	—	—	—	—	B7G	2	Czech
	2.8	0.05													
3W4	1.4	0.05	85	6.8	85	1.4	5.2	150	1.7	11	0.25	12	B7G	5	Japanese
	2.8	0.025													
3Z4	1.4	0.05	67.5	6.5	67.5	1.3	7.0	100	1.45	8	0.21	12	B7G	5	Japanese
4MP12	4.25	0.6	180	25	180	4.5	—	4.5	—	6	1.8	—	B7G	4	Japanese
6AQ5A	6.3	0.36	250	47	250	7	12.5	52	4.1	5	4.5	8	B7G	4	U.S.A.
6DL5	6.3	0.2	225	26	225	4.8	7.3	75	5.5	9	3.0	12	B7G	4	U.S.A.
6D55	6.3	0.8	250	27	200	9	270Ω	28	5.8	8	3.6	10	B7G	4	U.S.A.
6EH5	6.3	1.2	110	42	115	14.5	62Ω	11	14.6	8	1.4	—	B7G	6	U.S.A.
6L31	6.3	0.45	250	45	250	4.5	12.5	52	4.1	5	0.5	10	B7G	4	Czech
6P17	6.3	0.2	250	16	250	2.4	12.5	130	2.6	16	1.4	10	B7G	7	Edlswan
6T2+T1	6.3	0.45	120	35	120	12	5.5	12.5	8	3.5	1.0	—	B7G	8	Sovlet
8MP12	8.5	0.3	180	25	180	4.5	—	4.5	—	6	1.8	—	B7G	4	Japanese
9AQ5	9.45	0.3	250	45	250	4.5	12.5	52	4.1	5	4.5	8	B7G	4	Fivre
11CS	11.6	0.45	110	41	110	7.0	7.5	—	5.8	2.5	1.5	10	B7G	6	U.S.A.
12DM5	12.6	0.45	110	50	110	8.5	7.5	14	7.5	2.5	1.9	9	B7G	6	U.S.A.
12ED5	12.6	0.45	125	36	125	11.0	4.5	14	8.5	4.5	1.25	5	B7G	6	U.S.A.
12EH5	12.6	0.6	110	42	115	14.5	62Ω	11	14.6	8	1.4	—	B7G	6	U.S.A.
12R5	12.6	0.6	110	40	110	3.5	8.5	13	7.0	—	Vert. amp.		B7G	6	U.S.A.
17C5	16.8	0.45	110	50	110	8.5	7.5	10	7.5	2.5	1.9	—	B7G	6	U.S.A.
17CA5	16.8	0.45	125	37	125	11.0	4.5	15	9.2	4.5	1.5	6	B7G	6	U.S.A.
17CU5	16.8	0.45	120	50	110	8.5	8.0	10	7.5	2.5	2.3	10	B7G	6	U.S.A.
17R5	16.8	0.45	110	40	110	3.5	8.5	13	7.0	—	Vert. amp.		B7G	6	U.S.A.
25EH5	25	0.3	110	42	115	14.5	62Ω	11	14.6	8	1.4	—	B7G	6	U.S.A.
32ET5	32	0.1	110	30	110	2.8	7.5	21.5	5.5	2.8	1.2	10	B7G	6	U.S.A.
35L31	35	0.15	200	55	200	9.5	13	25	5.0	3.5	4.75	—	B7G	4	Czech
50CA5	50.0	0.15	125	37	125	11.0	4.5	15	9.2	4.5	1.5	6	B7G	6	Czech
50EH5	50.0	0.15	110	42	115	14.5	62Ω	11	14.6	8	1.4	—	B7G	6	Czech
6516	6.3	0.2	250	6	250	2.4	220Ω	80	3.9	6	2.1	8	B7G	7	Czech
6928	6.3	0.36	180	32.5	180	3.0	5.2	—	1.4	14	0.2	—	B7G	4	Czech
DDR7	6.3	0.2	250	16	250	2.4	12.5	130	2.6	16	1.4	10	B7G	7	E. Eurpn.
DL962	1.2	0.12	67.5	7	67.5	2	7	100	1.5	5	0.15	—	B7G	5	E. Eurpn.
	2.4	0.06													
DL963	1.2	0.2	150	10	67.5	2.6	7.5	90	2.2	12	0.6	—	B7G	3	E. Eurpn.
	2.4	0.1													
N25	1.4	0.05	85	5.0	85	1.0	5.2	—	1.4	14	0.2	—	B7G	9	G.E.C.
	2.8	0.025													
5CM6	4.7	0.6	250	45	250	4.5	12.5	50	4.1	5	4.5	8	B9A	10	U.S.A.
5CZ5	4.7	0.6	250	46	250	4.6	14	73	4.8	5	5.4	10	B9A	10	U.S.A.
6BM8	6.3	0.75	170	41	170	7.5	4.5	40	5.8	4	3.5	10	B9A	11	U.S.A.
6CR5	6.3	1.2	250	65	150	2.1	22.5	18	6.0	Hor.	deflection		B9A	12	U.S.A.
6CW5	6.3	0.76	170	70	170	5.0	12.5	23	10.0	2.4	5.6	10	B9A	13	U.S.A.
6CZ5	6.3	0.45	250	46	250	4.6	14	73	4.8	5.0	5.4	10	B9A	10	U.S.A.
6DB5	6.3	1.2	125	—	125	—	100Ω	—	—	—	—	—	B9A	14	U.S.A.
6DT5	6.3	1.2	250	39	250	2.0	16.5	—	6.5	—	—	—	B9A	15	U.S.A.
6DW5	6.3	1.2	200	55	150	2.0	22.5	15	5.5	—	—	—	B9A	10	U.S.A.
6DX8	6.3	0.7	170	18	170	3.1	2.1	100	11	—	—	—	B9A	16	U.S.A.
6DY5	6.3	0.8	170	53	170	10	10.4	20	9.0	3.0	4	6	B9A	17	U.S.A.
6DZ8	6.3	0.9	145	45	120	—	180Ω	—	7.5	—	2	—	B9A	18	U.S.A.
6EM5	6.3	0.8	250	35	250	3.0	18	—	5.1	Vert.	Amplifier		B9A	10	U.S.A.
6L43	6.3	0.65	250	30	150	7	3	90	11	10	3	—	B9A	19	Czech
6L50	6.3	1.0	250	70	250	6	12.5	16	—	—	—	—	B9A	20	Czech
6P15	6.3	0.76	250	48	250	5.4	140Ω	47.5	11.5	5.2	5.7	10	B9A	13	Ediswan
6T1+T1	6.3	0.45	250	45	250	5.0	12.5	52	4.5	5.0	3.8	—	B9A	21	Soviet
8BQ5	8.0	0.6	250	48	250	5.4	140Ω	47.5	11.5	5.2	5.7	10	B9A	13	U.S.A.
8EM5	8.4	0.6	250	35	250	3.0	18	—	5.1	Vert.	Amplifier		B9A	10	U.S.A.
9DZ8	9.0	0.6	145	45	120	—	180Ω	—	7.5	—	2	—	B9A	18	U.S.A.
10PL12	10.0	0.1	200	35	200	7.0	16.0	40	6.4	4.0	3.5	10	B9A	18	Ediswan
10P18	45.0	0.1	170	70	170	22	12.5	23	10	7.0	5.6	10	B9A	13	Ediswan
12CR5	12.6	0.6	250	65	150	2.1	22.5	18	6.0	Hor.	deflection		B9A	12	U.S.A.
12DB5	12.6	0.6	125	—	125	—	100Ω	—	—	—	—	—	B9A	14	U.S.A.
12DL8	12.6	0.55	12.6	40	12.6	75	0.5	0.48	15	—	—	—	B9A	22	U.S.A.
12DQ7	6.3	0.6	200	25	125	5.6	60Ω	53	10.5	—	—	—	B9A	23	U.S.A.
12DT5	12.6	0.6	250	38	250	2.0	16.5	—	6.5	—	—	—	B9A	15	U.S.A.
12DU7	12.6	0.275	12.6	12	12.6	1.5	2.2M	6	6.2	2.7	.025	10	B9A	24	U.S.A.
12DW5	12.6	0.6	200	55	150	2.0	22.5	15	5.5	—	—	—	B9A	10	U.S.A.
12DZ8	12.6	0.45	145	45	120	—	180Ω	—	7.5	—	2	—	B9A	18	U.S.A.
12EM6	12.6	0.5	12.6	2.5	12.6	—	1	—	—	—	0.01	10	B9A	25	U.S.A.

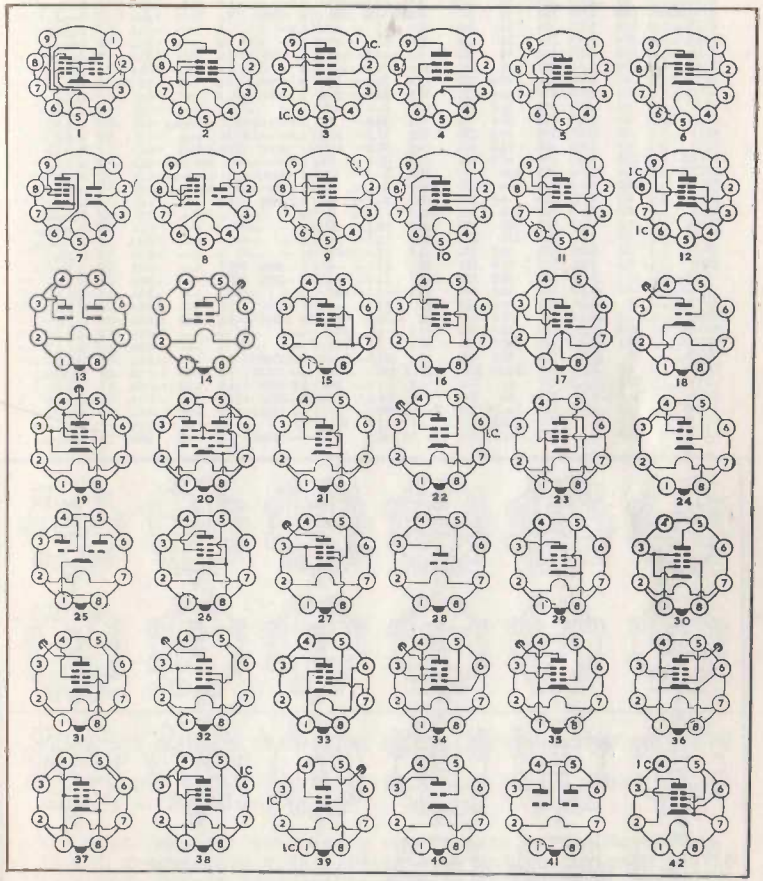
OUTPUT VALVES—Contd.

Type	FILAMENT or HEATER Volts	Amps	ANODE Volts	I/mA	SCREEN Volts	I/mA	Neg. Grid Volts	ra KΩ	gm mA/V	Anode Load Ω	Output W	Dis. %	BASE Type	Ref.	MAKER
12J8	12.6	0.35	12.6	0.14	12.6	3.0	2.2M	4	5.4	2	0.12	5	B9A	26	U.S.A.
13CL6	13.7	0.3	250	30	150	7.0	3.0	150	11.0	7.5	2.8	8	B9A	19	Fivre
15CW5	15.7	0.3	170	70	170	5.0	12.5	23	10.0	2.4	5.6	10	B9A	13	U.S.A.
15DQ8	15.0	0.3	170	18	170	3.1	2.1	100	11	—	—	—	B9A	16	U.S.A.
17CL6	17.5	0.3	180	30	150	7.0	3.0	150	11.0	7.5	2.8	8	B9A	19	Fivre
18DZ8	18.0	0.3	145	45	120	—	180Ω	—	7.5	—	2	—	B9A	18	U.S.A.
21L40	21.0	0.3	200	40	2.8	27	1	—	—	—	—	—	B9A	27	Czech
25CR5	25.0	0.3	250	65	150	2.1	22.5	18	6.0	Hor.	deflection		B9A	12	U.S.A.
25DT5	25.0	0.3	250	38	250	2.0	16.5	—	6.5	—	—	—	B9A	15	U.S.A.
30P16	16.0	0.3	200	45	200	8.5	13.9	24	7.6	4.0	4.2	—	B9A	13	Ediswan
30P18	16.0	0.3	200	34	200	3.8	6.0	55	10	7.0	4.4	10	B9A	13	Ediswan
30PL13	16.0	0.3	250	30	250	10.0	—	—	7.5	Frame	Scanning		B9A	28	Ediswan
35D5	35.0	0.15	170	52	170	3.0	190Ω	20	9.5	2.5	4.8	10	B9A	29	U.S.A.
35DZ8	35.0	0.15	145	45	120	—	180Ω	—	7.5	—	2	—	B9A	18	U.S.A.
6686	6.3	0.375	210	20	210	5.3	3	—	11	15	2.1	10	B9A	30	U.S.A.
6870	6.3	0.6	250	25	250	3.5	120Ω	—	—	—	—	—	B9A	31	U.S.A.



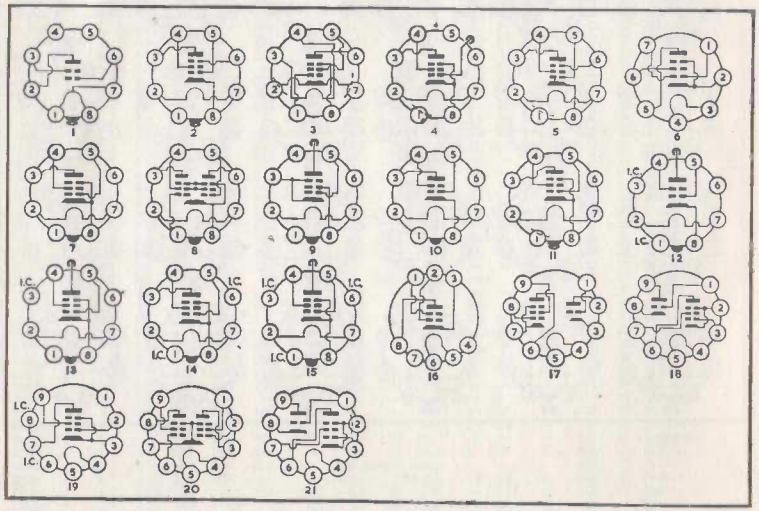
OUTPUT VALVES—Contd.

Type	FILAMENT or HEATER Volts	Amps	ANODE Volts	I/mA	SCREEN Volts	I/mA	Neg. Grid Volts	ra KΩ	gm mA/V	Anode Load Ω	Output W	Dis. %	BASE Type	Ref.	MAKER
6939	6.3	0.75	200	28	150	6.0	3.5	—	—	17.4	2.5	—	B9A	1	U.S.A.
	12.6	0.375													
6973	6.3	0.45	250	46	250	3.5	15.0	73	4.8	—	—	—	B9A	2	U.S.A.
7061	13.5	0.21	200	38	200	7.5	10	60	4.2	5	3.0	7	B9A	2	U.S.A.
7189	6.3	0.76	250	48	250	5.5	7.3	40	11.3	4.5	5.7	—	B9A	12	U.S.A.
7227	27.5	0.175	27.5	88	27.5	1.5	2.5	8.5	5	—	—	—	B9A	3	U.S.A.
7320	6.3	0.76	250	48	250	5.5	7.3	38.0	11.3	4.5	5.7	—	B9A	12	U.S.A.
AL860	2.4	0.56	200	35	150	6.0	7.0	—	6.2	—	—	—	B9A	4	E. Eurpn.
	4.8	0.28													
ECL83	6.3	0.6	200	27	200	4.4	13	65	6.0	7.5	2.5	—	B9A	7	European
ECL84	6.3	0.7	170	18	170	3.1	2.1	100	11	—	—	—	B9A	8	European
EL183	6.3	0.6	150	40	220	7.0	2.1	—	25	Video output			B9A	5	French
EL803S	6.3	0.64	200	32	200	4.7	110Ω	100	10	—	—	—	B9A	6	European
EL861	6.3	0.375	210	20	210	5.3	—	300	11	—	4.5	—	B9A	9	European
EL863	6.3	0.72	250	36	250	5.0	5.5	100	10.5	—	9.0	—	B9A	10	European
IF860	20	0.095	170	10	170	2.5	—	400	7.5	—	1.7	—	B9A	11	European
IL861	20	0.12	210	15	210	4.0	—	400	10.0	—	4.5	—	B9A	9	European
LN319	13	0.3	170	28	180	6.5	9.5	—	6.5	6.0	—	—	B9A	7	G.E.C.
N119	45.0	0.1	170	70	170	22	12.5	23	10	7.0	5.6	10	B9A	12	G.E.C.
N369	12.6	0.3	170	31	180	7.3	10.3	—	8.3	5.0	2.25	—	B9A	12	G.E.C.
PCL84	15.0	0.3	170	18	170	3.1	2.1	100	11	—	—	—	B9A	8	European
PL183	12.6	0.3	150	40	220	7.0	2.1	—	25	Video output			B9A	5	French
1Н3С	1.2	0.12	120	2.3	—	—	5.5	—	0.8	7.0	0.4	—	B9A	13	Soviet
2Ж1М	2.0	0.32	160	7.0	80	1.3	2.8	300	1.7	—	—	—	B9A	14	Soviet
2П1М	2.0	0.18	120	4.1	120	0.8	2.0	180	1.8	—	0.2	—	B9A	15	Soviet
2П2М	2.0	0.32	160	10.0	120	0.8	6.0	50	2.0	—	0.5	—	I.O.	15	Soviet
2П9М	2.0	1.0	250	35.0	150	1.5	—	40	2.5	2.5	6.0	—	I.O.	16	Soviet
4П1Л	2.1	0.65	120	25.0	120	4.0	6.4	—	6.0	—	1.0	—	I.O.	17	Soviet
	4.2	0.325													U.S.A.
6BU4	6.3	0.45	25K	1	—	—	8.4	8.2M	0.18	Col. focus triode			I.O.	18	
6DQ5	6.3	2.5	175	110	125	5.0	25	5.5	10.5	—	—	—	I.O.	19	U.S.A.
6DY7	6.3	1.2	250	50	250	3.0	12.5	28	6.0	—	—	—	I.O.	20	U.S.A.
6EF6	6.3	0.9	250	50	250	2.0	18	—	5.0	—	—	—	I.O.	21	U.S.A.
6EZ5	6.3	0.8	250	43	250	3.5	20	50	4.1	Vert. Defl.			I.O.	21	U.S.A.
6FH6	6.3	1.2	250	75	150	1.7	22.5	12	6.0	Hor. deflection			I.O.	22	U.S.A.
6L10	6.3	0.65	250	30	150	7	3	90	11	10	3	—	I.O.	23	Czech
6P16	6.3	0.6	250	40	250	8.5	—	—	—	5.2	4.5	—	I.O.	24	Ediswan
6V6GTA	6.3	0.45	250	47	250	7.0	12.5	52	4.1	5.0	4.5	8	I.O.	21	U.S.A.
6H7C	6.3	0.8	300	35	—	—	0	1.4	3.2	8.0	4.2	—	I.O.	25	Soviet
6П3М	6.3	1.0	300	72.0	250	7.0	14	25	6.0	3.0	7.0	—	I.O.	26	Soviet
6П6С	6.3	0.45	250	45.0	250	4.5	12.5	52	4.5	5.0	3.6	—	I.O.	26	Soviet
6П7С	6.3	0.9	250	72.0	250	8.0	14.0	30	5.9	—	6.0	—	I.O.	27	Soviet
6C4C	6.3	1.0	250	60.0	—	—	-45.0	0.8	5.25	2.5	3.5	—	I.O.	28	Soviet
6Ф6С	6.3	0.7	250	34.0	250	7.0	6.5	78	2.5	7.0	3.2	—	I.O.	26	Soviet
7EY6	7.2	0.6	250	44	250	3.0	17.5	60	4.4	Vert. deflection			I.O.	29	U.S.A.
9EF6	9.4	0.6	250	50	250	2.0	18	—	5.0	—	—	—	I.O.	21	U.S.A.
12EF6	12.6	0.45	250	50	250	2.0	18	—	5.0	—	—	—	I.O.	21	U.S.A.
12EN6	12.6	0.6	200	50	110	2.2	9.5	28	8.0	—	—	—	I.O.	21	U.S.A.
15A6C	15.0	0.3	250	34	250	3.0	16.5	80	2.5	10.0	3.2	—	I.O.	26	Soviet
17AV5GA	16.8	0.45	250	55	150	2.1	22.5	22.5	5.8	Line timebase amp.			I.O.	30	U.S.A.
17BQ6	16.8	0.45	250	55	150	2.1	22.5	22.5	5.8	Line timebase amp.			I.O.	22	U.S.A.
17DQ6/A	16.8	0.45	465	83	140	12.3	28	Line timebase amp.					I.O.	31	U.S.A.
17L6	16.8	0.45	200	55	110	7.0	8	30	9.5	3.0	4.3	10	I.O.	21	U.S.A.
18A5	18.5	0.3	200	40	125	1.1	17	27	4.8	—	—	—	I.O.	30	U.S.A.
25DQ6A	25.0	0.3	465	83	140	12.3	28	Line timebase amp.					I.O.	31	U.S.A.
25EC6	25.0	0.6	135	70	135	4.5	22.5	4.7	7.5	—	—	—	I.O.	32	U.S.A.
25П1С	25.0	0.3	160	38.0	135	4.0	20.0	40	2.5	6.0	3.0	—	I.O.	21	Soviet
30П1С	30.0	0.3	110	70.0	110	12.0	7.5	9.0	10.0	1.8	0.5	—	I.O.	21	Soviet
35CD6GA	35.0	0.45	175	75	175	5.5	55	7.2	7.7	Line timebase amp.			I.O.	32	U.S.A.
6146	6.3	1.25	200	100	200	—	29.5	—	7.0	—	—	—	I.O.	34	U.S.A.
6159	26.5	0.3	200	100	200	—	29.5	—	7.0	—	—	—	I.O.	35	U.S.A.
6394	6.3	1.2	250	77	250	3.5	22.5	—	5.4	—	—	—	I.O.	33	U.S.A.
6883	12.6	0.625	200	100	200	—	29.5	—	7.0	—	—	—	I.O.	34	U.S.A.
6893	12.6	0.4	600	66	185	10	—	—	—	—	27	—	I.O.	36	U.S.A.
7027	3.3	0.9	450	194	350	19.2	30	—	—	6	50*	1.5	I.O.	37	U.S.A.
EL131	6.3	1.5	250	100	250	15	12	—	11.0	15	3.5	—	I.O.	38	European
EL360	6.3	1.27	100	100	100	7	7.7	53	14	—	—	—	I.O.	31	European
KT88	6.3	1.8	250	140	250	—	—	12	11	6	50*	2	I.O.	26	G.E.C.
N308	38	0.2	400	10	250	4	Line output valve						I.O.	39	G.E.C.
R120	6.3	1.45	250	60	—	—	35	0.84	6.4	2.5	3.5	10	I.O.	40	French
CB244	2.0	0.18	120	4.1	120	0.7	2.0	180	1.8	—	0.13	—	I.O.	16	Soviet
CB246	2.0	0.32	160	7.0	80	1.5	2.5	300	1.8	—	0.5	0.5	I.O.	14	Soviet
CB258	2.0	0.32	160	5.5	70	1.0	3.0	150	2.0	—	0.2	—	I.O.	15	Soviet
CO243	2.0	0.24	120	4.0	—	—	0	18.0	1.8	—	1.0	—	I.O.	41	Soviet
N118	40	0.1	150	30	150	5.8	6.3	—	7.5	5.8	2.6	14	B8A	42	G.E.C.



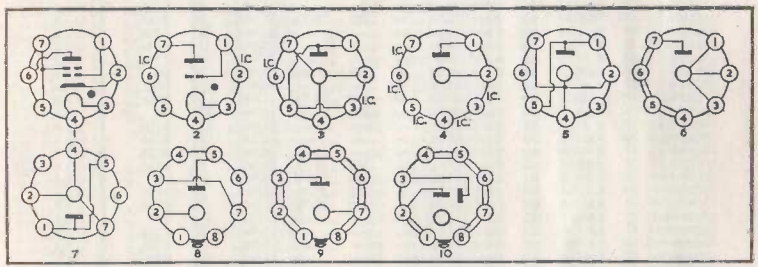
OUTPUT VALVES—Contd.

Type	FILAMENT or HEATER Volts	FILAMENT or HEATER Amps	ANODE Volts	ANODE I/mA	SCREEN Volts	SCREEN I/mA	Neg. Grid Volts	ra KΩ	gm mA/V	Anode Load Ω	Anode Output W	Dis. %	BASE Type	BASE Ref.	MAKER
DL29	1.4	0.22	90	9.5	90	1.6	4.5						B8G	1	European
	2.8	0.11													
EL30	6.3	0.4	250	18	250	3.5	4.5	200	6.5	—	1.8	10	B8G	2	European
PTT208P	18.0	0.14	200	18	200	3.6	4.5	140	6	15	1.1	6	F8A	3	French
R117	10.0	0.7	200	35	200	5.0	5	43	8.5	7.5	2.0	6	F8A	4	French
R123	18.0	0.4	200	35	200	5.0	5	43	8.5	7.5	2.0	6	F8A	4	French
R134	18.0	0.225	200	18	200	3.6	4.5	160	6	15	0.8	6	F8A	5	French
R147	18.0	0.14	200	18	200	3.6	4.5	160	6	15	1.1	6	F8A	3	French
6095	6.3	0.36	250	47.0	250	7.0	12.5	52.0	4.1	5000	4.5	8	B7G	6	U.S.A.
6CN5	6.3	0.9	350	66.0	250	7.0	18.0	33.0	5.2	4200	10.8	15	I.O.	7	U.S.A.
6DZ7	6.3	?	440	35.0	300	12.0	—	—	—	—	—	—	I.O.	8	U.S.A.
6EX6	6.3	2.25	175	67.0	175	3.3	30.0	8.5	7.7	Horizontal def. amp			I.O.	9	U.S.A.
6EY6	6.3	0.68	250	44.0	250	3.0	17.5	60.0	4.4	Vertical def. amp			I.O.	10	U.S.A.
7D11	6.3	1.8	425	35.0	425	6.0	50.0	12	11	6000	50.0 P.P	2	I.O.	11	Brimar
21EX6	21.5	0.6	175	67.0	175	3.3	30.0	8.5	7.7	Horizontal def. amp			I.O.	9	U.S.A.
25GF6	25.0	0.3	170	100	170	8.8	21.0	5.5	11	Horizontal def. amp			I.O.	12	U.S.A.
30P19	25.0	0.3	170	100	170	8.8	21.0	5.5	11	Horizontal def. amp			I.O.	13	Ediswan
7408	6.3	0.45	250	4.7	250	7.0	12.5	4.1	4.5	5000	8.0	—	I.O.	7	U.S.A.
E235L	6.3	1.2	100	100	100	7.0	8.2	5	14	—	—	—	I.O.	14	European
E236L	6.3	1.2	100	100	100	7.0	8.2	5	14	—	—	—	I.O.	15	European
F2a11	6.3	2.0	250	100	250	14.5	6.5	23	18	—	—	—	G8A	16	European
6DQ8	6.3	0.71	170	18.0	170	3.1	2.1	100	11	—	—	—	B9A	17	U.S.A.
6FY8	6.3	1.2	125	50.0	125	10	13.5	—	7	2000	2.7	—	B9A	18	U.S.A.
12FY8	12.6	0.6	125	50.0	125	10	13.5	—	7	2000	2.7	—	B9A	18	U.S.A.
15DX8	15.0	0.3	170	18.0	170	3.1	2.1	100	—	—	—	—	B9A	17	U.S.A.
25FY8	25	0.3	125	50.0	125	10	13.5	—	7	2000	2.7	—	B9A	18	U.S.A.
45BQ5	45.0	0.1	170	70.0	170	22	12.5	23	10	7000	5.6	10	B9A	19	U.S.A.
45DQ8	45.0	0.1	170	18.0	170	3.1	2.1	100	—	—	—	—	B9A	17	U.S.A.
45DX8	45.0	0.1	170	18.0	170	3.1	2.1	100	—	—	—	—	B9A	17	U.S.A.
50FY8	50	0.15	125	50.0	125	10	13.5	—	7	2000	2.7	—	B9A	18	U.S.A.
ERL80	6.3	0.55	250	2 x 24	250	2 x 4.5	160Ω	—	—	10000	3.0	10	B9A	20	European
LN119	48.0	0.1	170	41	170	7.5	4.5	40.0	5.8	4000	3.5	10	B9A	21	G.E.C.
N379	16.0	0.3	200	34	200	3.8	6.0	55.0	10	7000	4.4	10	B9A	19	G.E.C.
PLL80	12.0	0.3	250	2 x 24	250	2 x 4.5	160Ω	—	—	10000	3.0	10	B9A	20	European
UCL84	45.0	0.1	170	18.0	170	3.1	2.1	100	—	—	—	—	B9A	17	European
ULL80	25.0	0.1	250	2 x 24	250	2 x 4.5	160Ω	—	—	10000	3.0	10	B9A	20	European



REGULATORS and THYRATRONS

Type	Used as	HEATER Volts	HEATER Amps	STABILISED SUPPLY Volts	STABILISED SUPPLY Amps	STRIKING VOLTS	VOLTAGE DROP	TUBE CURRENT m/A Min.	TUBE CURRENT m/A Max.	Max. Anode Volts	Max. Peak Current Amps	Control Ratio	BASE Type	BASE Ref.	Maker
85A3	V.R.	—	—	85	—	115	—	1	4	—	—	—	B7G	3	Mullard
6354	V.R.	—	—	143.7	—	180	—	5	15	—	—	—	B7G	4	U.S.A.
EN92	Relay	6.3	0.15	—	—	—	—	—	—	500	100	250	B7G	1	European
EN93	Relay	6.3	0.25	350 Anode volts 50v. Grid 25mA									B7G	2	European
M8098	V.R.	—	—	85	—	125	—	1	10	—	—	—	B7G	3	Mullard
M8163	V.R.	—	—	143-147	—	180	—	5	15	—	—	—	B7G	4	Mullard
M8204	Relay	6.3	0.6	650V peak		100 mA average							B7G	1	Mullard
M8223	V.R.	—	—	150	—	185	—	5	30	—	—	—	B7G	5	Mullard
M8224	V.R.	—	—	108	—	133	—	5	30	—	—	—	B7G	5	Mullard
OC2	V.R.	—	—	75	—	—	—	5	30	—	—	—	B7G	7	U.S.A.
QS75/20	V.R.	—	—	75	—	110	—	2	20	—	—	—	B7G	6	E.E.
QS1200	V.R.	—	—	150	—	180	—	5	15	—	—	—	B7G	4	E.E.
QS1204	V.R.	—	—	108	—	133	—	5	25	—	—	—	B7G	7	E.E.
QS1207	V.R.	—	—	150	—	185	—	5	30	—	—	—	B7G	7	E.E.
QS1208	V.R.	—	—	108	—	133	—	5	30	—	—	—	B7G	7	E.E.
QS1209	V.R.	—	—	84	—	125	—	1	8	—	—	—	B7G	7	E.E.
QS1210	V.R.	—	—	150	—	165	—	5	30	—	—	—	B7G	7	E.E.
QS1211	V.R.	—	—	108	—	133	—	5	30	—	—	—	B7G	7	E.E.
QS1212	V.R.	—	—	85	—	115	—	1	10	—	—	—	B7G	7	E.E.
QS1205	V.R.	—	—	75	—	105	—	5	40	—	—	—	I.O.	8	E.E.
QS1206	V.R.	—	—	108	—	133	—	5	40	—	—	—	I.O.	8	E.E.
QS75/60	V.R.	—	—	75	—	117	—	5	60	—	—	—	B8G	9	E.E.
QS108/45	V.R.	—	—	108	—	120	—	5	45	—	—	—	B8G	10	E.E.
M8132	V.R.	—	—	108	—	133	—	5	30	—	—	—	None		Mullard
M8133	V.R.	—	—	150	—	185	—	5	30	—	—	—	None		Mullard
M8142	V.R.	—	—	85	—	125	—	1	10	—	—	—	None		Mullard
M8178	Relay	6.3	0.6	650V peak		100 mA average							None		Mullard
M8190	V.R.	—	—	85	—	115	—	1	4	—	—	—	None		Mullard
M8207	V.R.	—	—	90	—	115	—	1	40	—	—	—	None		Mullard
M8208	V.R.	—	—	143-147	—	180	—	5	15	—	—	—	None		Mullard
QS1201	V.R.	—	—	75	—	110	—	2	15	—	—	—	None		E.E.
QS1202	V.R.	—	—	108	—	133	—	2	15	—	—	—	None		E.E.
QS1203	V.R.	—	—	150	—	180	—	2	15	—	—	—	None		E.E.
QS1213	V.R.	—	—	85	—	115	—	1	10	—	—	—	None		E.E.



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TELEVISION C.R. Tubes

Type	Dia. in Ins.	Remarks	HEATER Volts	HEATER Amps	2nd or FINAL ANODE Volts	Focus Anode	ACC	¢ off	Focus A/T or Focus Def. Method	Def. Angle	BASE Type	Ref.	Maker
3RP4	3		6.3	0.6	2.5K	—	—	—	ES/ES	—	B12A	1	U.S.A.
5ABP4	5		6.3	0.6	6.0K	—	—	—	ES/ES	—	B14A	2	U.S.A.
5BHP4	5	A	6.3	0.6	12.0K	—	—	—	ES/ES	—	B14A	—	U.S.A.
7ABP4	7		6.3	0.6	10.0K	—	—	—	ES/MG	50	B12A	3	U.S.A.
8XP4	8	R	6.3	0.6	22.0K	—	—	—	ES/MG	90	B12A	4	U.S.A.
9QP4	9		6.3	0.31	6.8K	—	—	—	ES/MG	70	B12A	24	U.S.A.
10ABP4	10	R	6.3	0.6	12.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
10ABP4A	10	GR	6.3	0.6	12.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
10ABP4C	10	R	6.3	0.6	12.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
10ADP4	10	R	8.4	0.45	12.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
10AEP4	10	R	6.3	0.6	12.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
14ACP4	14	R	6.3	0.6	14.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
14AEP4	14	R	6.3	0.6	14.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
14AJP4	14	R	6.3	0.6	11.0K	—	—	—	ES/MG	110	B12A	5	U.S.A.
14ARP4	14		6.3	0.6	14.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
14ASP4	14	R	6.3	0.6	14.0K	—	—	—	ES/MG	110	I.O.	6	U.S.A.
14ATP4	14	R	6.3	0.6	14.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
14AZP4	14	RA	6.3	0.6	20.0K	—	—	—	M/M	70	B12A	7	U.S.A.
14CP4A	14	AR	6.3	0.6	14.0K	—	—	—	ES/MG	70	B12A	7	U.S.A.
14NP4	14	R	6.3	0.6	14.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
14NP4A	14	RA	6.3	0.6	14.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
14RP4	14	AR	6.3	0.6	14.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
14RP4A	14	AR*	6.3	0.6	14.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
14SP4	14	R	6.3	0.6	16.0K	—	—	—	ES/MG	85	B12A	5	U.S.A.
14UP4	14	R	6.3	0.6	14.0K	—	—	—	ES/MG	70	B12A	7	U.S.A.
14WP4	14	R	6.3	0.6	14.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
14XP4A	14	R	6.3	0.45	16.5K	—	—	—	ES/MG	85	B12A	5	U.S.A.
14ZP4	14	R	6.3	0.6	15.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
16WP4B	16	RA*	6.3	0.6	16.0K	—	—	—	ES/MG	70	B12A	11	U.S.A.
17BJR4	17	AG*R	6.3	0.6	14.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
17BKP4	17	G*R	6.3	0.45	14.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
17BKP4A	17	AG*R	6.3	0.45	14.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
17BMP4	17	AG*R	6.3	0.6	14.0K	—	110	32-50	ES/MG	90	B12A	5	U.S.A.
17BNP4	17	AGR	6.3	0.6	14.0K	—	110	37-50	ES/MG	90	B12A	5	U.S.A.
17BRP4	17	R*	6.3	0.6	15.0K	—	—	—	ES/MG	110	I.O.	6	U.S.A.
17BSP4	17	AGR	6.3	0.45	14.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
17BTP4	17	RA	12.6	0.3	18.0K	—	—	—	ES/M	90	B12A	25	U.S.A.
17BUP4	17	*GR	6.3	0.6	12.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
17BVP4	17	R	6.3	0.6	16.0K	—	—	—	ES/MG	110	7 Pin	8	U.S.A.
17BWP4	17	R	6.3	0.6	16.0K	—	—	—	ES/MG	110	7 Pin	8	U.S.A.
17BYP4	17	R	6.3	0.6	16.0K	—	—	—	ES/MG	110	7 Pin	8	U.S.A.
17BZP4	17	AGR	6.3	0.6	14.0K	—	300	28-60	ES/MG	110	I.O.	6	U.S.A.
17CAP4	17	R	6.3	0.6	16.0K	—	—	—	ES/MG	110	I.O.	6	U.S.A.
17CBP4	17	*GR	6.3	0.6	12.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
17CDP4	17	AGR	8.4	0.45	14.0K	—	300	28-72	ES/MG	110	I.O.	6	U.S.A.
17CEP4	17	R	6.3	0.6	16.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
17CEP4A	17	RA	6.3	0.6	16.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
17CFP4	17	R	6.3	0.6	16.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
17CGP4	17	AGR	6.3	0.6	11.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
17CKP4	17	R	6.3	0.6	15.0K	—	300	28-72	ES/MG	110	I.O.	6	U.S.A.
17CMP4	17	R	6.3	0.6	16.0K	—	300	33-77	ES/MG	90	B12A	5	U.S.A.
17CNP4	17	RA	6.3	0.6	18.0K	—	300	33-77	ES/MG	90	B12A	5	U.S.A.
17CWP4	17	RA	6.3	0.6	16.0K	—	—	—	ES/ES	110°	B8A	6	U.S.A.
17CYP4	17	RA	6.3	0.6	16.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
17CZP4	17	RA	6.3	0.6	16.0K	—	—	—	ES/MG	90°	B12A	5	U.S.A.
17DAP4	17	RA	6.3	0.6	16.0K	—	—	—	ES/MG	110	B8H	18	U.S.A.
17DBP4	17	RA	6.3	0.3	16.0K	—	—	—	ES/MG	70°	B12A	5	U.S.A.
17DCP4	17	RA	6.3	0.3	16.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
17DEP4	17	RA	2.35	0.6	16.0K	—	—	—	ES/MG	110	BH8	?	U.S.A.
17DHP4	17	RA	6.3	0.45	16.0K	—	—	—	ES/M	110	I.O.	6	U.S.A.
17DJP4	17	RA	6.3	0.6	16.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
17DKP4	17	RA	6.3	0.6	16.0K	—	—	—	ES/MG	110	B8H	19	U.S.A.
17DLP4	17	RA	6.3	0.6	18.0K	—	—	—	ES/M	110	B8H	26	U.S.A.
17DQP4	17	RA	6.3	0.45	16.0K	—	—	—	ES/M	110	B8H	27	U.S.A.
17KP4A	17	R	6.3	0.6	16.0K	—	—	—	ES/MG	70	B12A	9	U.S.A.
17RP4C	17	AGR	6.3	0.6	12.0K	—	300	33-77	ES/MG	70	B12A	5	U.S.A.
17VP4B	17	A*R	6.3	0.6	12.0K	—	300	33-77	ES/MG	70	B12A	5	U.S.A.
21ATP4B	21	A*GR	6.3	0.6	16.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
21AXP22A	21	C	6.3	0.6	25.0K	—	—	—	ES/MG	70	B14A	10	U.S.A.
21BSP4	21	G*RA	6.3	0.6	16.0K	—	300	28-72	ES/MG	90	B12A	11	U.S.A.
21BTP4	21	R	6.3	0.6	22.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
21CBP4	21	GAR	6.3	0.6	14.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.

Base diagrams for the C.R.T.'s shown on this page appear on Page 38.

TELEVISION C.R. Tubes—Contd.

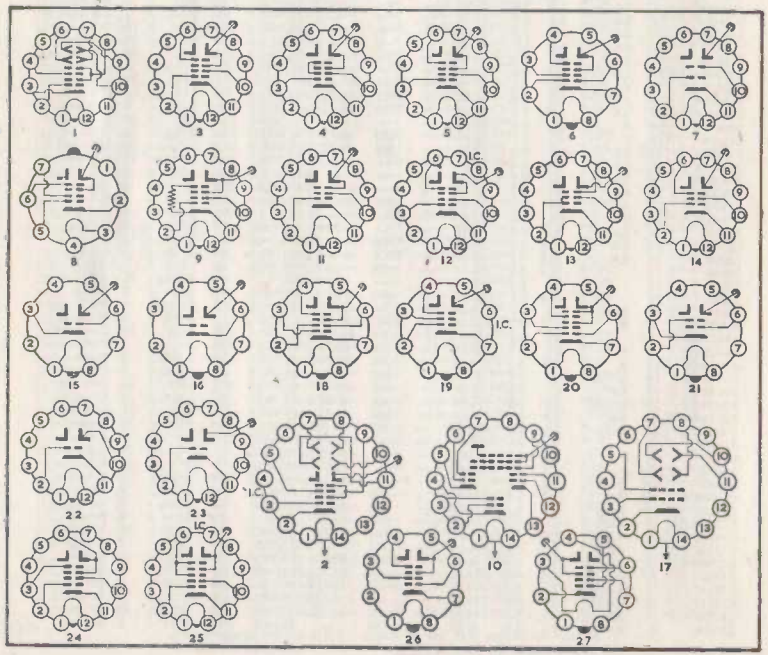
Type	Dia. in Ins.	Remarks	HEATER Volts	HEATER Amps	2nd or FINAL ANODE Volts	Focus Anode	ACC	¢ off	Focus A/T or Focus Def. Method	Def. Angle	BASE Type	Ref.	Maker
21CBP4A	21	AGR	6.3	0.6	14.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
21CDP4	21	GR*	6.3	0.45	16.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
21CDP4A	21	AGR*	6.3	0.45	16.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
21CEP4A	21	RA	6.3	0.6	18.0K	—	300	28-72	ES/MG	110	I.O.	6	U.S.A.
21CGP4	21	AGR*	6.3	0.6	18.0K	—	110	32-50	ES/MG	90	B12A	5	U.S.A.
21CHP4	21	AGR	6.3	0.6	18.0K	—	110	37-50	ES/MG	90	I.O.	6	U.S.A.
21CKP4	21	R	6.3	0.6	20.0K	—	110	—	ES/MG	90	I.O.	6	U.S.A.
21CLP4	21	RA	12.6	0.3	18.0K	—	—	—	ES/M	90	B12A	25	U.S.A.
21CMP4	21	RA*	6.3	0.6	16.0K	—	300	—	ES/MG	90	B12A	5	U.S.A.
21CQP4	21	R	6.3	0.6	18.0K	—	110	—	ES/MG	110	7 Pin	8	U.S.A.
21CSP4	21	R	6.3	0.6	18.0K	—	110	—	ES/MG	110	7 Pin	8	U.S.A.
21CUP4	21	AG*	6.3	0.6	16.0K	—	300	28-72	MG/MG	90	B12A	11	U.S.A.
21CVP4	21	AGR	6.3	0.6	16.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
21CWP4	21	AGR*	6.3	0.6	16.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
21CXP4	21	AR*	6.3	0.6	20.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
21CYP22	21	C	6.3	0.6	25.0K	—	—	—	ES/MG	70	B14A	—	U.S.A.
21CZP4	21	RA*	6.3	0.6	18.0K	—	300	28-72	ES/MG	110	I.O.	6	U.S.A.
21DAP4	21	R	6.3	0.6	18.0K	—	300	28-72	ES/MG	110	I.O.	6	U.S.A.
21DEP4	21	AR*	6.3	0.6	18.0K	—	300	28-72	ES/MG	110	I.O.	6	U.S.A.
21DFP4	21	AR*	6.3	0.6	18.0K	—	300	28-72	ES/MG	110	I.O.	6	U.S.A.
21DMP4	21	RA	6.3	0.6	20.0K	—	—	—	ES/MG	110	BH8	6	U.S.A.
21DVP4	21	RA	6.3	0.3	20.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
21DWP4	21	RA	6.3	0.3	18.0K	—	—	—	ES/MG	110	B8H	6	U.S.A.
21EAP4	21	RA	6.3	0.6	18.0K	—	—	—	ES/MG	110	B8H	18	U.S.A.
21ELP4	21	RA	6.3	0.3	20.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
21EMP4	21	RA	6.3	0.6	18.0K	—	—	—	ES/MG	110	B8H	6	U.S.A.
21ENP4	21	RA*	6.3	0.3	20.0K	—	—	—	ES/MG	90	B12A	5	U.S.A.
21EQP4	21	RA	6.3	0.6	18.0K	—	—	—	ES/MG	110	B8H	19	U.S.A.
21ERP4	21	RA	6.3	0.6	20.0K	—	—	—	ES/M	110	B8H	19	U.S.A.
21ESP4	21	RA	6.3	0.6	18.0K	—	—	—	ES/M	110	B8H	26	U.S.A.
21EWP4	21	RA	6.3	0.6	20.0K	—	—	—	M/M	72	B12A	7	U.S.A.
22EP22	22	C	6.3	0.6	25.0K	—	—	—	—	72	B14A	10	U.S.A.
24ADP4	24	AGR*	6.3	0.6	18.0K	—	300	28-72	ES/MG	90	B12A	11	U.S.A.
24AEP4	24	AR	6.3	0.6	20.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
24AHP4	24	R	6.3	0.6	20.0K	—	—	—	ES/MG	110	I.O.	6	U.S.A.
24AJP4	24	R	6.3	0.6	18.0K	—	300	28-72	ES/MG	110	B12A	5	U.S.A.
24AMP4	24	AR*	6.3	0.6	20.0K	—	300	28-72	ES/MG	110	7 Pin	8	U.S.A.
24AVP4	24	RA	2.35	0.6	18.0K	—	—	—	ES/MG	110	B8H	18	U.S.A.
24AWP4	24	RA	6.3	0.6	20.0K	—	—	—	ES/MG	110	B8H	6	U.S.A.
24AXP4	24	RA	6.3	0.3	20.0K	—	—	—	ES/MG	110	B8H	6	U.S.A.
27VP4	27	AR	6.3	0.6	18.0K	—	300	28-72	ES/MG	90	B12A	5	U.S.A.
27WP4	24	RA	6.3	0.6	20.0K	—	—	—	ES/M	90	B12A	5	U.S.A.
7203A	14	RA*	6.3	0.3	14.0K	—	—	70	MG/MG	90	B12A	7	G.E.C.
7204A	14	RA	12.6	0.3	14.0K	—	400	—	MG/MG	65	B12A	22	G.E.C.
7205A	14	RA	12.6	0.3	14.0K	—	400	—	ES/MG	85	B12A	3	G.E.C.
7404A	17		12.6	0.3	16.0K	—	400	—	MG/MG	65	B12A	7	G.E.C.
7501A	21		6.3	0.3	18.0K	—	—	—	ES/MG	85	B12A	23	G.E.C.
7902A	21		12.6	0.3	20.0K	—	400	—	ES/MG	85	B12A	7	G.E.C.
7503A	21	RAG	12.6	0.3	16.0K	—	—	30-72	MG/MG	110	B8H	6	G.E.C.
AW17-20	7	R	6.3	0.3	12.0K	—	300	30-80	ES/MG		B12A	—	Mullard
AW17-69	6.5		6.3	0.3	14.0K	—	400	44-103	ES/MG	70	B12A	14	European
AW22-10	9	R	6.0	0.3	12.0K	—	300	30-70	ES/MG	58	B12A	3	Mullard
AW36-48	14	R	6.3	0.3	14.0K	—	300	30-70	ES/MG	70	B12A	3	Mullard
AW36-80	14	R*GA	6.3	0.3	12.0K	—	300	40-80	ES/MG	90	B12A	5	European
AW43-88	17	RA	6.3	0.3	14.0K	—	400	36-78	ES/MG	110	B8H	20	European
AW53-80	21	R*GA	6.3	0.3	16.0K	—	300	40-80	ES/MG	90	B12A	12	European
AW53-88	21	RA	6.3	0.3	16.0K	—	300	30-72	ES/MG	110	B8H	20	European
AW61-88	24	RGA	6.3	0.3	16.0K	—	400	36-78	ES/M	110	B8H	20	European
B23M1	8		6.3	0.5	9.0K	—	—	35-75	MG/MG	?	I.O.	16	E. Eurpn.
B30M1	11	•	6.3	0.5	12.0K	—	—	35-90	MG/MG	?	I.O.	21	E. Eurpn.
B30M2	11	•	6.3	0.3	12.0K	—	—	35-90	MG/MG	?	I.O.	21	E. Eurpn.
B43M1	17	R*G	6.3	0.3	16.0K	—	—	53-115	MG/MG	70	B12A	7	E. Eurpn.
C14HM/1	14	RA*	6.3	0.6	14.0K	—	300	55-77	M/M	70°	B12A	7	Brimar
C14LM	14	RAG	6.3	0.3	16.0K	—	400	33-77	ES/MG	70	B12A	9	Brimar
C14/LM/1	14	RA*	6.3	0.3	16.0K	—	300	33-77	ES/M	70°	B12A	9	Brimar
C14PM	14	RA*G	6.3	0.3	16.0K	—	300	33-77	ES/MG	70	B12A	12	Brimar
C17AA	17	RA	6.3	0.3	16.0K	—	500	—	ES/MG	110	B8H	6	Brimar
C17HM/1	17	RAG*	6.3	0.6	16.0K	—	300	55-77	ES/MG	90	B12A	7	Brimar
C17JM	17	RAG*	6.3	0.6	14.0K	—	300	33-77	ES/MG	90	B12A	12	Brimar
C17LM	17	RAG	6.3	0.3	18.0K	—	400	33-77	MG/MG	70	B12A	9	Brimar
C17PM	17	RAG*	6.3	0.3	16.0K	—	300	33-77	ES/MG	70	B12A	12	Brimar
C17SM	17	RAG	6.3	0.3	16.0K	—	300	33-77	ES/MG	90	B12A	12	Brimar
C21AA	21	RAG	6.3	0.3	16.0K	—	500	—	ES/MG	110	B8H	6	Brimar

Base diagrams for the C.R.T.'s sh ge appear on Page 38.

TELEVISION C.R. Tubes—Contd.

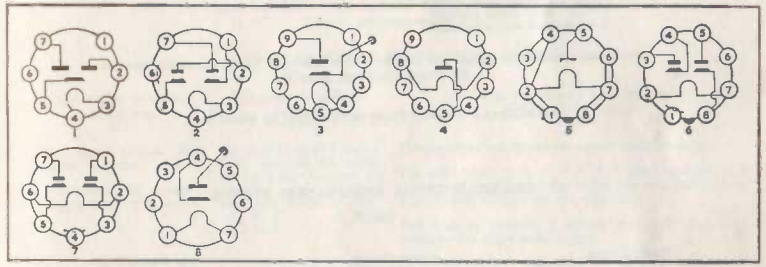
Type	Dia. in Ins.	Remarks	HEATER Volts	HEATER Amps	2nd or FINAL ANODE Volts	Focus Anode	ACC	e off	Focus A/T or Focus Def. Method	Def. Angle	BASE Type	Ref.	Maker
C21SM	21	RAG	6.3	0.3	18.0K	—	300	33-77	ES/MG	90	B12A	12	Brimar
C21TM	21	RA*G	12.6	0.3	18.0K	—	300	30-72	MG/MG	90	B12A	7	Brimar
C24KM	24	RA*	6.3	0.3	16.0K	—	300	40-80	M/M	90°	B12A	13	Brimar
CME141	14	RA	12.6	0.3	14.0K	—	300	51	ES/MG	70°	B12A	3	Ediswan
CME1402	14	RGA*	12.6	0.3	14.0K	—	300	30-72	ES/MG	90	B12A	3	Mazda
CME1702	17	RA	12.6	0.3	15.0K	—	300	30-72	ES/MG	90°	B12A	12	Ediswan
CME1703	17	RA	12.6	0.3	16.0K	—	400	30-70	ES/MG	110	B8H	6	Ediswan
CME2101	21	RA	12.6	0.3	16.0K	—	400	30-70	ES/MG	110	B8H	6	Ediswan
CRM172	17	R*GA	12.6	0.3	14.0K	—	300	51	ES/MG	90	B12A	7	Mazda
CRM173	17	RGA*	12.6	0.3	16.0K	—	300	30-72	MG/MG	90	B12A	7	Mazda
MP17-20	5		6.3	0.3	14.0K	—	300	40-86	ES/MG	53	B12A	13	European
MW13-35	5		6.3	0.3	7.0K	—	300	30-70	MG/MG	53	I.O.	?	Mullard
MW17-69	6.5	A	6.3	0.3	14.0K	—	300	40-85	MG/MG	70	B12A	13	European
MW22-22	9		6.3	0.3	9.0K	—	300	30-70	MG/MG	64	B12A	7	Mullard
MW36-67	14	R	6.3	0.3	14.0K	—	300	30-70	MG/MG	65	B12A	7	Mullard
MWS3-22	21	RA*	6.3	0.3	16.0K	—	300	33-77	MG/MG	70	B12A	13	French
ЛК715	6		2.5	2.1	3.5K	—	—	—	MG/MG		I.O.	15	Soviet
ЛК715А	6		6.3	0.47	3.8K	—	—	—	MG/MG		I.O.	15	Soviet
ЛК726	6		2.5	2.1	3.5K	—	—	—	MG/MG		I.O.	15	Soviet
28ЛК15	6		6.3	0.47	3.5K	—	—	—	MG/MG	46.5	I.O.	15	Soviet
ЛК740	7		6.3	0.47	2.8K	—	—	—	ES/ES	—	B14A	17	Soviet
23ЛК1Б	9		6.3	0.47	6.0K	—	—	—	—/MG	46.5	I.O.	16	Soviet
31ЛК1Б	12		6.3	0.47	8.0K	—	—	—	—/MG	—	I.O.	16	Soviet
40ЛК1Б	15		6.3	0.47	10.0K	—	—	—	—/MG	—	I.O.	15	Soviet

A = Aluminated. G = Tinted. R = Rectangular Tube. * = Single Ion Trap.



DIODES

Type	FILAMENT or HEATER Volts	FILAMENT or HEATER Amps	Input Volts (RMS)	Max. I/mA	BASE Type	Ref.	Maker
2EN5	2.1	0.45	—	—	B7G	1	U.S.A.
6B31	6.3	0.3	150	9	B7G	7	Czech
6097	6.3	0.3	117	9.0	B7G	2	U.S.A.
6887	6.3	0.2	360	10.0	B7G	2	U.S.A.
6919	6.3	0.2	165	3.0	B7G	2	U.S.A.
7055	13.5	0.155	350	10.0	B7G	2	U.S.A.
AA91E	6.3	0.3	117	9	B7G	2	European
E91AA	6.3	0.3	117	9.0	B7G	2	E. Eurpn.
EA962	6.3	0.125	100	0.1	B7G	8	E. Eurpn.
EAA901S	6.3	0.3	117	9.0	B7G	2	E. Eurpn.
M8212	6.3	0.3	117	9.0	B7G	2	Mullard
6AF3	6.3	1.2	4.5K P.I.V.	185	B9A	3	U.S.A.
12AF3	12.6	0.6	4.5K P.I.V.	185	B9A	3	U.S.A.
R290	1.85	2.7	100	15	B9A	4	French
6X6	6.3	0.3	100	4.0	I.O.	6	Soviet
29C1	4.0	0.8	100	3	I.O.	5	Ediswan
R128	18.0	0.2	200	5	I.O.	6	French
M8184	6.3	0.3	150	9	None	—	Mullard



202 - HANDBOOK OF INTEGRATED CIRCUITS (IC's) EQUIVALENTS AND SUBSTITUTES

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RADIO RECEIVING VALVE DESIGNATION SYSTEMS

EUROPEAN Example EABC80

First Letter (E) — Filament or Heater Voltage. Heater Current.

A—4 V
C—200 mA
D—up to 1.4 V

E—6.3 V
G—5 V
H—150 mA
K—2 V battery
O—no filament
P—300 mA
U—100 mA
X—600 mA

Second or following Letters (ABC) — Type Classification

A—RF single diode
B—RF double diode
C—triode (except output and gas-filled triodes)
D—output triode
E—tetrode (except output tetrode)
F—pentode (except output pentode)
H—hexode or heptode
K—heptode or octode
L—output tetrode or pentode
M—tuning indicator
N—gas-filled triode or tetrode
P—tube with secondary emission (used as third letter only)
Q—enneode
T—miscellaneous
X—full-wave gas-filled mains rectifier
Y—half-wave mains rectifier
Z—full-wave mains rectifier

First Figure (8) — Valve Holder and Base Type

1. Various, including Y8A special German type Side contact type.
2. Loctal B8G
3. Octal.
4. Rimlock B8A.
5. 9 pin Loctal B9G and special bases.
6. Sub miniature or wired-in.
7. Sub miniature or wired-in.
8. Noval B9A.
9. Miniature B7G.

Second or following figures (0) — Design

Indicates a particular design and usage.

Designation system for special and Industrial type tubes: the figures are placed between the letters (e.g. E90F, EI81CC)

EABC80=6.3 V heater Triple diode Triode on Noval base

AMERICAN RETMA DESIGNATION SYSTEM

12AU7

Figure Group (12) — Filament or Heater Voltage

0—cold cathode
1—between 0.1 and 2.1
2—between 2.1 and 2.9
3—between 3.0 and 3.9
5—between 5 and 5.9
6—between 6 and 6.9
7—between 7 and 7.9
etc.

Notes: When heater or filament is centre tapped for use on two voltages, the higher voltage number is used.

On cathode-ray types this first number refers to the screen diameter in inches.

7 and 14 are 'nominal' ratings: operation should be at 6.3 and 12.6 volts

Letter Group (AU)

Letter(s) indicating the serial order of assignment of the designation.

The letters U, V, W, X, Y, Z commonly are used to indicate rectifiers.

S—as first letter indicates single-ended tubes, related to grid-cap types.

Combinations like AB, AC, AD, and AE were used when all the single letters were used up.

S—as second letter indicates single-ended construction.

Note: P as second letter is destined for designation of cathode-ray types. e.g., 5KP4.

Note: Whenever possible, the 12 V equivalent of a 6 V tube has kept the same letters, e.g. 6SK7GT and 12SK7GT are similar except for heater rating.

2nd Figure Group (with additional letters) (7)

The number of useful elements.

Notes: In metal tubes the shell counts as one element. Shielding by or in base does not count as an element.

Additional letters:
G—glass bulb ST-12 size to ST-16
GT—glass bulb T-9 size
GT/G—glass bulb T-9 size, interchangeable with G and GT types
X—low loss base for HF use (ceramic)
Y—low loss base for HF use (phenolic)

Letters A, B, C as additional letter indicating a minor change.

12AU7=12.6/6.3 heater Twin Triode

DESIGNATION SYSTEM FOR CATHODE-RAY TUBES

EUROPEAN Example MW43-64

First Letter — M

Deflection and Focusing
A = Magnetic deflection, electrostatic focusing.
D = Electrostatic deflection and focusing.
M = Magnetic deflection and focusing.

Second Letter (W) — Screen Properties

B = Blue fluorescence and phosphorescence, short persistence.
C = Blue violet fluorescence and phosphorescence, very short persistence.
F = Orange fluorescence and phosphorescence, very long persistence.
G = Green fluorescence and phosphorescence, medium persistence.
L = Orange fluorescence and phosphorescence, long persistence.
N = Blue-green fluorescence and green phosphorescence, long persistence.
P = Blue fluorescence and greenish-yellow phosphorescence, very long persistence.
R = Greenish-yellow fluorescence, and yellow phosphorescence, long persistence.
W = Screen for picture tubes, white screen colour, short persistence.

Figures (43-64)

First group of figures for round screens: screen diameter in cm.

For rectangular screens: screen diagonal in cm.

The second group of figures is a serial number indicating a particular design.

MW43-64=Magnetic deflection and focusing. White screen short persistence picture tube 43 cms. diagonal screen

AMERICAN RETMA DESIGNATION SYSTEM

21AMP4A

First Figure or Group of Figures (21)

For round screens: diameter in inches.

For rectangular screens: screen diagonal in inches.

Letter(s) Preceding Letter P (AM)

Letter(s) is (are) a serial code applying to tubes of the same diameter of diagonal and indicates particular design of tube. (A, B, C . . . Z, AB, AC, etc.)

Letter P Followed by a Number (One or Two Figures) (P4A)

This combination designates screen characteristics.

The suffix letter (A, B, C, or F, etc.), when used, indicates a later and modified version which can be substituted for any previous version but not vice versa.

The letter W indicates a military type and, when used, precedes any other suffix letters.

TRANSMITTING TUBES DESIGNATION SYSTEM

EUROPEAN QQE03-20A

First Letter (QQ)

D = Rectifying tube (including grid controlled tubes)
M = Triode (AF amplifying tube or modulator)
P = Pentode
Q = Tetrode
QQ = Double Tetrode
T = Triode (R.F., A.F. or oscillator tube)

Second Letter (Third Letter for Dual Systems) (E)

A = Directly-heated, tungsten filament
B = Directly-heated, thoriated tungsten filament
C = Directly - heated, oxide - coated filament
E = Indirectly - heated, oxide - coated filament

Third Letter

G = Mercury-vapour filling
I = Forced-air cooling
W = Water cooling
X = Xenon filling

The tube is radiation-cooled, if cooling is not indicated in the type number

Figures (03-20A)

First figure or group of figures.

Rectifying tubes: approximately D.C. output voltage in KV's in a three-phase half-wave rectifying circuit.
Transmitting tubes: approximately maximum anode voltage in kilovolts

Second Group of Figures

Rectifying tubes: approximately D.C. output power in watts or kilowatts per tube in a three-phase half-wave rectifying circuit.
R.F. tubes: approximate output power in watts or kilowatts in class C telegraphy.
Modulators: approximate anode dissipation in watts or kilowatts.
Additional letter(s): base type.

AMERICAN RETMA

No system yet adopted

NUMERICAL/ALPHABETICAL INDEX

Valve Type	Page No.	Valve Type	Page No.	Valve Type	Page No.	Valve Type	Page No.
1AF33	10	4CM4	18	6BN4A	18	6DW5	30
1AF34	10	4CS6	10	6BN8	18	6DX8	18
1AM4	10	4CY5	10	6BS4	18		30
1AQ5	17	4DE6	10	6BU4	32	6DY5	30
1AR5	10	4DK6	10	6BW8	12	6DY7	32
1AS5	10	4DT6	10	6C2C	22	6DZ7	34
1C91	26	4ES8	18	6C4C	32	6DZ8	18
1DN5	10	4EW6	10	6C12	17		30
1EDR1	26	4MP12	30	6C16	16	6EA5	10
1ER11	26	5A/170K	12		24	6EA7	24
1F33	10	5A/172G	26	6C31	18	6EA8	12
1F34	10	5A/173G	26	6CA4	28		18
1G3GT	28	5A/174G	26	6CB6A	10	6EB8	12
1H2	28	5A/175G	26	6CC10	22		19
1H3C	32	5A/180M	16	6CC31	18	6EC7	16
1H33	17	5ABP4	36	6CC40	18	6EF6	32
1H34	17	5AS4A	28	6CC41	18	6EH5	30
1H35	17	5BHP4	36	6CC42	18	6EH8	19
1J3	28	5BQ7A	18	6CF5	10	6EM5	30
1K3	28	5BS8	18	6CG8A	12	6ER5	24
1L33	30	5BW8	12		18	6ES6	10
1L34	30	5BX7	18	6CK4	22		16
1L91	26	5BZ7	18	6CL8A	12	6ES8	19
1LB7	14	5CG4	28		18	6ET6	10
1M90	27	5CL8A	12	6CM4	18	6EV5	16
1N3	26		18	6CN5	34	6EW6	10
1S2A	28	5CM6	30	6CQ8	12	6EX6	34
1Y32	28	5CQ8	12	6CQ8A	18	6EY6	34
2AIM (Sov.)	17		18	6CR4	24	6EZ8	19
2BN4A	18	5CR8	12	6CR5	30	6F10	14
2CY5	10		18	6CR8	12	6F17	10
2EA5	10	5CZ5	30		18	6F19	12
2EN5	39	5DH8	12	6CS8	12	6F20	12
2EY5	16		18		18	6F21	10
2FY6	16	5EA8	12	6CU8	12	6F22	12
2HIM	22		18		18		16
2J2	28	5EH8	12	6CW5	30	6F23	12
2L2	26		18	6CW7	18	6F24	14
2L35	30	5FV8	16	6CX8	12		26
2S/141G	26		24		18	6F31	10
3AB4	24	5GH8	16	6CY5	10	6F32	10
3AFA4	18		24	6CY7	18	6F33	10
3BN4	18	5R4GYB	28	6CZ5	30	6F35	10
3BN4A	18	5Z4C	28	6DA4	28	6F36	10
3C2	28	5Z10	28	6DA5	27	6F40	12
3CF5	10	6A10C (Sov.)	17	6DA7	18	6FD12	12
3CY5	10	6AF3	39	6DB5	30	6FG6	27
3DK6	10	6AM8A	12	6DC8	12	6FH6	32
3EA5	10	6AN8A	12	6DE4	28	6FM8	24
3ER5	24		18	6DE7	18	6FV6	16
3EY5	16	6AQ5A	30	6DG7	12	6FV8	16
3L31	30	6AQ6	18	6DJ8	18		24
3L35	30	6AT8A	12	6DK6	10	6FW8	24
3RP4	36		18	6DL5	30	6FY8	24
3W4	30	6AU6A	10	6DL7	27		34
3Z4	30	6AU8A	12	6DN7	22	6GA8	24
4AU6	10		18	6DQ5	32	6GH8	16
4BA6	10	6B3	28	6DQ8	24		24
4BC5	10	6B31	39		34	6HJ	10
4BE6	17	6BC32	18	6DR7	18	6H7C	32
4BN4	18	6BD7A	18	6DR8	12	6H8C	23
4BN6	10	6BE8A	12	6DS5	30	6H9C	23
4BU8	12		18	6DS8	17	6H31	17
4BZ6	10	6BK7B	18	6DT5	30	6J6A	18
4CB6	10	6BM8	18	6DT8	18	6L10	32
4CE5	10		30	6DU6	27	6L12	19

Valve Type	Page No.	Valve Type	Page No.	Valve Type	Page No.	Valve Type	Page No.
6L13	19	9X8	12	12EC8	12	17BTP4	36
6L16	24		20		20	17BUP4	36
6L31	30	10ABP4	36	12ED5	30	17BVP4	36
6L43	30	10ABP4A	36	12EF6	32	17BWP4	36
6L50	30	10ABP4C	36	12EG6	10	17BYP4	36
6LD12	19	10ADP4	36	12EH5	30	17BZP4	36
6LD13	19	10AEP4	36	12EK6	10	17C5	30
6M40	27	10C8	12	12EL6	18	17C8	12
6N3	28		20	12EM6	12	17CA5	30
6P15	30	10C14	17		31	17CAP4	36
6P17	30	10DA7	20	12EN6	32	17CBP4	36
6P26	32	10DE7	20	12EZ6	10	17CDP4	36
6RP10	12	10EB8	12	12F31	10	17CEP4	36
6RR8	12		20	12FA6	17	17CEP4A	36
6S2A	28	10EG7	24	12FB5	16	17CFP4	36
6T8A	19	10ER5	24	12FG6	27	17CGP4	36
6U5M	28	10F18	12	12FK6	18	17CK4	36
6U8A	12	10FD12	12	12FM6	18	17CL6	31
	19	10L14	20	12FQ8	24	17CMP4	36
6V6GTA	32		24	12FR8	16	17CNP4	36
6X6 (Sov.)	39	10LD12	20		24	17CU5	30
6X8A	12	10LD13	20	12FT6	18	17CWP4	36
	20	10P18	30	12FX8	16	17CYP4	36
6Y50	28	10PL12	20		24	17CZP4	36
6Z31	28		30	12FY6	18	17D4	28
7ABP4	36	11C5	30	12FY8	24	17DAP4	36
7D11	34	11CY7	20		34	17DBP4	36
7DJ8	20	12AD5	12	12H31	17	17DCP4	36
7ED7	16	12AE7	20	12J8	31	17DE4	28
7ES8	24	12AF3	39	12MIM (Sov.)	17	17DEP4	36
7EY6	32	12AJ6	18	12R5	30	17DHP4	36
8AU8A	12	12AL8	12	13CL6	31	17DJP4	36
	20		20	13D2	23	17DKP4	36
8AW8A	12	12AU8	12	13DE7	20	17DLP4	36
	20		20	13DR7	20	17DQP4	36
8BA8/A	12	12B3	28	13EC7	16	17DQ6/A	32
	20	12BC32	18	13GC8	16	17H3	28
8BH8	12	12BL6	10		24	17KP4A	36
	20	12BR7A	20	14ACP4	36	17L6	32
8BN8	20	12BX6	16	14AEP4	36	17R5	30
8BQ5	30	12CN5	10	14AJP4	36	17RP4C	36
8CN7	20	12CR5	30	14ARP4	36	17VP4B	36
8CS7	20	12CT8	12	14ASP4	36	18A5	32
8CX8	12		20	14ATP4	36	18DZ8	20
	20	12CX6	10	14AZP4	36		31
8CY7	20	12CY6	10	14CP4A	36	18F24	14
8D8	12	12DB5	30	14G6	20	18FW6	10
8EB8	12	12DE8	12	14NP4	36	18FX6	17
	20	12DF5	28	14NPA4	36	18FY6	18
8EM5	30	12DF7	20	14RP4	36	19BW7	16
8MP12	30	12DK5	12	14RP4A	36	19BX6	16
8SN7GTB	23	12DK7	12	14SP4	36	19CL8A	16
8XP4	36	12DL8	30	14UP4	36		24
9AQ5	30	12DM5	30	14WP4	36	19CS4	28
9AU7	20	12DQ7	12	14XP4A	36	19DA5	27
9BK7A	20		30	14Y7	17	19DC8	16
9BR7	20	12D57	12	14ZP4	36	19DE7	20
9BR8	12	12DT5	30	15A6C	32	19EA8A	16
	20	12DT7	20	15CW5	31		24
9CL8	12	12DT8	20	15DQ8	20	20D4	17
	20	12DU7	30		31	20Y40	28
9D7	12	12DV7	20	15DX8	24	21ATP4B	36
9DZ8	20	12DV8	12		34	21AXP22A	36
	30	12DW5	31	16WP4B	36	21BSP4	36
9EF6	32	12DW7	20	17AV5GA	32	21BTP4	36
9EN7	16	12DW8	20	17BJP4	36	21CBP4	36
	24	12DY8	12	17BKP4	36	21CBP4A	37
9GB8	16		20	17BKP4A	35	21CDP4	37
	24	12DZ6	10	17BMP4	36	21CDP4A	37
9QP4	36	12DZ8	20	17BNP4	36	21CEP4A	37
9T8	20		31	17BQ6	32	21CGP4	37
9U8A	12	12EA6	10	17BRP4	36	21CHP4	37
	20			17BSP4	36	21CKP4	37

Valve Type	Page No.
21CLP4	37
21CMP4	37
21CQP4	37
21C5P4	37
21CUP4	37
21CVP4	37
21CW7	24
21CWP4	37
21CXP4	37
21CYP22	37
21CZP4	37
21DAP4	37
21DEP4	37
21DFP4	37
21DJ8	24
21DMP4	37
21DVP4	37
21DWP4	37
21EAP4	37
21ELP4	37
21EMP4	37
21ENP4	37
21EQP4	37
21ERP4	37
21ES8	24
21ESP4	37
21EX6	34
21EWP4	37
21L40	31
22DE4	28
22EP22	37
24ADP4	37
24AEP4	37
24AHP4	37
24AJP4	37
24AMP4	37
24AVP4	37
24AWP4	37
24AXP4	37
25CR5	31
25D4	28
25DQ6A	32
25DT5	31
25EC6	32
25EH5	30
25FY8	24
	34
25GF6	34
25MK15	28
26AE6	28
27BL8	16
	24
27VP4	37
27WP4	37
29C1	39
30C13	12
	20
30C15	16
	24
30L15	20
30P16	31
30P18	31
30P19	34
30PL13	20
	31
31BX7	23
32ET5	30
35A3	28
35C3	28
35CD6A	32
35D5	31
35DZ8	20
35L31	30
35Y31	28
35AM3	28
38A3	28
45BQ5	34
45DQ8	24
	34
45DZ8	24
	34
50BM8	12
	20
50CA5	30
50DC4	28
50EH5	30
50FY8	24
	34
55N3	28
85A3	35
396A	20
401A	10
407A	20
408A	10
409A	10
416B	25
5624	27
5764	26
5765	26
5766	26
5767	26
5884	26
5968	26
5969	26
5970	26
5972	26
6082A	23
6095	34
6097	39
6099	18
6146	32
6147	26
6159	32
6189	21
6224	26
6269	26
6354	35
6384	32
6385	21
6386	21
6394	23
6414	21
6418	26
6419	26
6486/A	13
6516	10
	30
6520	23
6526	26
6533	26
6535	24
6540	26
6582/A	13
6678	13
	21
6686	31
6687	17
6688	13
6689	14
6754	28
6763	29
6832	26
6840	21
6851	21
6854	21
6870	14
	31
6872	26
6877	21
6883	32
6887	39
6888	14
6893	32
6900	21
6913	21
6919	39
6922	21
6923	26
6927	18
6928	30
6939	32
6943	26
6944	26
6945	26
6946	26
6947	26
6948	26
6954	10
6955	22
6968	10
6973	32
6977	26
7001	26
7025	22
7027	32
7032	11
7036	11
7044	22
7054	14
7055	39
7056	11
7057	22
7058	22
7059	14
	22
7060	14
	22
7061	32
7062	22
7118	22
7119	22
7125	14
7137	18
7150	14
7167	11
7189	32
7199	14
	22
7203A	37
7204A	37
7205A	37
7227	32
7236	23
7244	18
7245	18
7247	24
7258	14
	22
7318	22
7320	32
7327	26
7404A	37
7408	26
7432	21
7433	21
7434	21
7435	14
7436	31
7437	26
7438	21
7501A	32
7502A	39
7503A	14
A1600	32
A2272	21
AA91E	21
AL860	39
AW17-20	21
AW17-69	26
AW22-10	18
AW36-48	30
AW36-80	32
AW43-88	26
AW53-80	26
AW53-88	26
AW61-88	26
B23M1	26
B30M1	26
B30M2	10
B43M1	22
B109	10
B729	32
C3a	26
C3g	26
C3m	22
C14HM1	32
C14LM	11
C14LM1	11
C14PM	22
C17AA	14
C17HM/1	39
C17JM	11
C17LM	22
C17PM	22
C17SM	14
C21AA	22
C21SM	14
C21TM	22
C24KM	32
CC81E	22
CC82E	22
CC86E	22
CME141	14
CME1402	18
CME1702	14
CME1703	11
CME2101	32
CO241	14
CO243	22
CO244	37
CO257	37
CO258	37
CRM172	32
CRM173	23
D3a	18
DAF961	18
DCF60	24
DDR3	14
DDR7	22
DF60	22
DF668	32
DF669	26
DF703	37

Valve Type	Page No.
DF961	11
DH109	22
DH118	24
DH119	22
DH718	24
DK962	17
DL29	34
DL620	26
DL962	30
DL963	30
DM160	26
DX144	25
DX145	25
DY667	26
E80CF	14
	22
E81CC	22
E81H	16
E82CC	21
E83CC	24
E86C	21
E90F	11
E91AA	39
E95F	11
E99F	11
E180CC	22
E181CC	22
E182CC	22
E235L	34
E236L	34
E280F	16
E283CC	24
EA766	26
EA962	39
EAA901S	39
EBF83	14
EC71	26
EC86	22
EC95	21
EC760	25
EC903	18
ECC70	26
ECC86	22
ECC88	22
ECC189	22
ECC230	23
ECC801S	22
ECC802	24
ECC802S	22
ECC803	24
ECC865	22
ECC960	18
ECC962	18
ECF82	14
	22
ECF83	14
	17
	22
ECH83	14
	22
ECH113	17
ECL83	22
	32
ECL84	22
	32
EF89F	14
EF97	11
EF98	11
EF183	16
EF184	16
EF730	26
EF731	26
EF732	26
EF734	26
EF762	26
EF806S	14
EF860	14
EF861	11
EF905	16
EH81	17
EH171	11
EH900S	34
EL30	26
EL71	32
EL131	32
EL183	32
EL360	32
EL803S	32
EL861	32
EL863	34
ELL80	27
EM84	27
EM840	27
EMM801	35
EN92	35
EN93	28
EY83	28
EY88	28
EZ900	34
F2a11	28
GZ37	32
IF860	32
IL861	32
KT88	24
LN119	34
	22
LN319	32
	14
LZ329	22
	18
M8080	28
M8091	35
M8098	35
M8132	35
M8133	15
M8140	29
M8141	35
M8142	25
M8144	25
M8149	22
M8162	35
M8163	35
M8178	25
M8179	15
M8180	39
M8184	35
M8190	14
M8195	11
M8196	35
M8204	35
M8207	35
M8208	39
M8212	25
M8214	35
M8223	35
M8224	39
MP17-20	38
MW13-35	38
MW17-69	38
MW22-22	38
MW36-67	38
MW53-22	30
N25	32
N118	32
N119	32
N308	32
N369	34
N379	27
O2DF	35
OC2	22
PC86	24
PC92	24
PC95	22
PCC88	22
PCC89	22
PCC189	14
PCF84	22
	32
PCL84	32
	16
PF83	32
PL183	34
PLL80	27
PM84	24
PTT120P	24
PTT141	14
PTT202S	15
PTT203	15
PTT206P	34
PTT208P	15
PTT212P	15
PTT213P	15
PTT214P	15
PTT216	14
PTT217	15
PTT241P	15
PTT243P	15
PTT301A	28
PY83	28
PY88	35
QS75/20	35
QS75/60	35
QS108/45	35
QS1200	35
QS1201	35
QS1202	35
QS1203	35
QS1204	35
QS1205	35
QS1206	35
QS1207	35
QS1208	35
QS1209	35
QS1210	35
QS1211	35
QS1212	35
QS1213	35
R116	14
R117	34
R120	32
R122N	15
R123	34
R125C	23
R126F	15
R128	39
R134	34
R142	15
R143	15
R144	11
R145	15
R147	34
R148	24
R150	14
R242P	27
R243	25
R263	27
R271	27
R290	39
S6F12	11
S6F17	11
T5S1	11
T5S2	18
T5S3	14
T5S4	14
TY86F	28
U47	29
U49	28
U54	28
U118	29
U119	28
U192	28
U291	39
U339	29
U381	28
U718	29
UC95	24
UCC84	22
UCC88	24
UCC189	24
UCF80	14
	22
UCH80	17
UCL84	24
	34
UF81	14
UF86	14
UH171	17
ULL80	34
UM81	27
UM84	27
UU12	28
W25	11
W118	14
W119	14
W739	14
WD119	16
X20	17
X25	17
X118	17
X119	17
XR6	27
XR7	27
XR8	27
XR9	26
Y25	27
Y119	27
Z329	14
ZD25	11

RUSSIAN INDEX

Valve Type	Page No.
ЛК715	38
ЛК715А	38
ЛК726	38
18ЛК15	38
ЛК740	38
23ЛК1Б	38
31ЛК1Б	38
40ЛК1Б	38
6Б2П	10
6К1П	10
6К4П	10
6Ж1П	10
6Ж2П	10
6Ж3П	10
6Ж4П	10
6Ж5А	10
6Ж5П	10
2Г2М	22
2С3М	22
2Ф1М	22
2Ф2М	22
6Г1	23
6Г2	23
6Г7	23
6Г7С	23
6Ф5С	23
12Г1	23
12Г2	23
СБ240	23
СБ243	23
СБ245	23
УБ24с	23
СБ244	32
СБ246	32
СБ258	32
2Ж1М	32
2П1М	32
2П2М	32
2П9М	32
4П1Л	32
6Ц6А	26
6П3М	32
6П6С	32
6П7С	32
6Ф6С	32
25П1С	32
30П1С	32
6Н1П	20
6Н2П	20
О6П2Б	27
6С6Ь	26

Valve Type	Page No.
6С7Б	26
6Ж1Б	26
6Ж2Ь	26
1П2Б	26
6С1П	18
6С2П	18
6Н15П	18
6Х2П	28
6П4П	28
1Ц1С	28
1Ц7С	28
2Ц2С	28
5Ц3С	28
5Ц4С	28
30Ц1М	28
30Д6С	28
1А1П	17
6А2П	17
6Д1М	17
6Л7	17
СБ242	17
6П1П	30
6П2П	30
2Ж2М	14
2К1М	14
2К2М	14
6Ь8С	14
6Ж2М	14
6Ж3М	14
6Ж4	14
6Ж3	14
6Ж6М	14
6Ж7	14
6Ж8	14
6К3	14
6К4	14
6К7	14
6К9С	14
6П9	14
6ФУ6	14
12Б1М	14
12Б2М	14
12Ж1М	14
12Ж8	14
12К1М	14
12К3	14
12К4	14
СБ241	14
Г837	11
1К1П	10
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2П111	10

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